



# भारत का राजपत्र The Gazette of India

प्राधिकार से प्रकाशित  
PUBLISHED BY AUTHORITY

सं० 50] नई दिल्ली, शनिवार, दिसम्बर 15, 1984 (अग्रहायण 24, 1906)

No. 50] NEW DELHI, SATURDAY, DECEMBER 15, 1984 (AGRAHAYANA 24, 1906)

इस भाग में भिन्न पृष्ठ संख्या दी जाती है जिससे कि यह अलग संकलन के रूप में रखा जा सके  
[Separate paging is given to this Part in order that it may be filed as a separate compilation]

## भाग III—खण्ड 2

### [PART III—SECTION 2]

पेटेंट कार्यालय द्वारा जारी की गई पेटेंटों और डिजाइनों से सम्बन्धित अधिसूचनाएं और नोटिस

[Notifications and Notices issued by the Patent Office relating to Patents and Designs]

THE PATENT OFFICE  
PATENTS AND DESIGNS

Calcutta, the 15th December 1984

#### ADDRESS AND JURISDICTION OF OFFICES OF THE PATENT OFFICE

The Patent Office has its Head Office at Calcutta and Branch Offices at Bombay, Delhi and Madras having territorial jurisdiction on a zonal basis as shown below :—

Patent Office Branch,  
Todi Estates, III Floor,  
Lower Parel (West),  
Bombay-400 013.

#### Telegraphic address "PATOFFICE"

The States of Gujrat, Maharashtra, and Madhya Pradesh  
and the Union Territories of Goa, Daman and Diu and  
Dadra and Nagar Haveli.

Patent Office Branch,  
Unit No. 401 to 405, III Floor,  
Municipal Market Building,  
Saraswati Marg, Karol Bagh,  
New Delhi-110 005.

#### Telegraphic address "PATENTOFIC"

The States of Haryana, Himachal Pradesh, Jammu and  
Kashmir, Punjab, Rajasthan and Uttar Pradesh and the  
Union Territories of Chandigarh and Delhi.

Patent Office Branch,  
61, Wallajah Road,  
Madras-600 002.

#### Telegraphic address "PATENTOFIS"

The States of Andhra Pradesh, Karnataka, Kerala, Tamil-  
nada, and the Union Territories of Pondichery, Laccadive,  
Minicoy and Amindivi Islands.

Patent Office (Head Office),  
214, Acharya Jagadish Bose Road,  
Calcutta-700 017.

#### Telegraphic address "PATENTS"

Rest of India.

All applications, notices, statements or other documents or  
any fee required by the Patents Act, 1970 or the Patents  
Rules, 1972 will be received only at the appropriate Offices  
of the Patent Office.

**Fees :—**The fees may either be paid in cash or may be  
sent by Money Order or Postal Order, payable to the Con-  
troller at the appropriate Offices or by bank draft or cheque,  
payable to the Controller drawn on a scheduled bank at the  
place where the appropriate office is situated.

## APPLICATION FOR PATENT FILED AT THE HEAD OFFICE, 214, ACHARYA JAGADISH BOSE ROAD,

CALCUTTA-17

The dates shown in crescent brackets are the dates claimed under Section 135, of the Act.

7th November, 1984

772|Cal|84. Development Consultants Private Limited. Improvements in or relating to discharge gates.

773|Cal|84. Development Consultants Private Limited. Improvements in or relating to dewatering tanks.

774|Cal|84. Hoesch Aktiengesellschaft. Process and means for hot-dip galvanizing finned tubes.

9th November, 1984

775|Cal|84. Beloit Corporation. Slice lip adjustment.

776|Cal|84. Werner Schatz. Method and device for production of metal blocks, castings or profile material with enclosed hard metal grains.

12th November, 1984

777|Cal|84. NL Industries, Inc. Process of removing hydrogen sulfide from gas mixtures.

778|Cal|84. Microdot Inc. Seal Assembly.

779|Cal|84. Maverick Microsystems International, Inc. Full Field Micr Encoder.

13th November, 1984

780|Cal|84. Fujitsu Limited. A digital radio relay equipment.

781|Cal|84. International Minerals & Chemical Corporation. Process for the production of silicon from raw material-quartz in a furnace of the electrical low shaft type.

14th November, 1984

782|Cal|84. Nissan Chemical Industries Ltd. Process for the preparation of a catalyst system suitable for use in producing polyethylene. [21st August, 1982].

783|Cal|84. Mrs. Aurora Calatayud. Kinematic transmission device for textile machine.

784|Cal|84. Didler-Werke AG. Closing plates made of fire-resistant material for linear or rotatory slide-valve shutters.

785|Cal|84. Comurhex. Process for the preparation of pulverulent metallic oxides from aqueous solution or solid mixtures of metallic nitrates.

786|Cal|84. Ribi Immunochem Research, Inc. Method of preparing therapeutic composition. [23rd May, 1983].

## APPLICATION FOR PATENTS FILED IN THE PATENT OFFICE, BOMBAY BRANCH AT TODI ESTATES,

THIRD FLOOR, SUN MILL COMPOUND, LOWER PAREL (WEST), BOMBAY-400 013

8th October, 1984

279|BOM|84. Chaitanika S Gandhi. A novel method of repairing glass lined surfaces of vessels reactions, agitators, thermowells and the like.

11th October, 1984

280|BOM|84. Madhu J. Saraiya. Electrodes having chemically Microstructured active surfaces for electrolytic process.

12th October, 1984

281|BOM|84. Ahmedabad Textile Industry's Research Association. Means for preventing Accumulation for rotor deposits.

15th October, 1984

282|BOM|84. Hindustan Lever Ltd. (U.K.) [14-10-83]. Transparent Detergent Bars.

283|BOM|84. Makhan Jhavar. A Sterilizer Unit.

284|BOM|84. Makhan Jhavar. A Sterilizer Unit

17th October, 1984

285|BOM|84. Pyrene Chemical Services Ltd. (U.K.) [26-10-83]. Phosphating Compositions And Processes.

286|BOM|84. Pyrene Chemical Services Ltd. (U.K.) [2-11-83]. Phosphating Compositions And Processes.

## APPLICATIONS FOR PATENTS FILED AT THE PATENT OFFICE BRANCH, 61, WALLAJAH ROAD,

MADRAS-600 002

29th October, 1984

806|Mas|84. Masonellam International Inc., Improved butterfly valve.

807|Mas|84. Richard Ian Mills. An earth brick machine. (May 4, 1984).

808|Mas|84. Pilkington Brothers P.L.C. Sheet material of fibre-reinforced cement. (October 31, 1983).

30th October, 1984

809|Mas|84. V. K. R. Rao. Improvements in or relating to an extractor for rice bran and other extractable materials.

810|Mas|84. Gang-MAVAG Mozdony-, Vagones Gepgyar. Process for the heat treatment of soft martensitic CrNi-alloyed hydro-mechanical steel castings with low carbon content, and/or their heat treatment prior to and after welding for the purpose of repair.

811|Mas|84. SKF Steel Engineering AB. Carbon gasification.

812|Mas|84. SKF Steel Engineering AB. Method and plant for cooling pellets.

813|Mas|84. SKF Steel Engineering AB. A method and plant for reducing oxidic material while simultaneously generating a gas suitable as fuel gas.

814|Mas|84. SKF Steel Engineering AB. Method and means for partial combustion and gasification of carbonaceous material.

815|Mas|84. SKF Steel Engineering AB. A method and plant for reducing oxidic material while simultaneously generating a suitable for the recovery or thermal energy.

816|Mas|84. SKF Steel Engineering AB. A method and plant for reducing oxidic material.

817|Mas|84. G. V. Patankar. An extensible attachment for domestic pressure cookers.

818|Mas|84. K. T. Thomas. Thomson's rolling shutters automatic locking system.

31st October, 1984

819|Mas|84. Linde Aktiengesellschaft. Improved semipermeable membrane gas separation system.

820|Mas|84. V. L. Churchill Limited. A hand-held diesel engine injector tester. (November 3, 1983).

821|Mas|84. K. Vijayachandran. An improved flushing mechanism.

2nd November, 1984

822|Mas|84. Graviner Limited. Electrical circuit arrangements. (November 4, 1983).

823|Mas|84. Central Oil & Gas Limited. Offshore oil production method. (November 2, 1983).

824[Mas]84. Charbonnages De France. Direct view remote control method for workings machine and transmitter and receiver assembly for carrying out such method.

825[Mas]84. Raychem Limited. Method and protected material for making an electrical device. (November 2 1983).

826[Mas]84. Raychem Limited. Protected metal components. (November 2, 1983).

#### ALTERATION OF DATE

154757. Ante dated to 30th March, 1979. (903|Del|82)

154809. Ante dated to 23rd February, 1979. (598|Cal|82)

154811. Ante dated to 7th February, 1979. (1059|Cal|82)

154812. Ante dated to 27th July, 1979. (1269|Cal|82)

154813. Ante dated to 3rd April, 1979. (94|Cal|83)

154828. Ante dated to 14th November, 1979. (620|Cal|82)

154829. Ante dated to 26th September, 1979. (651|Cal|82)

154830. Ante dated to 1st September, 1979. (1413|Cal|82)

154757. Ante dated to 30th March, 1979. (903|Del|82)

154769. Ante dated to 8th October, 1980. (726|Del|83)

154841. Ante dated to 26th September, 1979. (1014|Cal|79)

#### COMPLETE SPECIFICATION ACCEPTED

Notice is hereby given that any person interested in opposing the grant of patents on any of the applications concerned, may, at any time within four months of the date of this issue or within such further period not exceeding one month applied for on Form 14 prescribed under the Patents Rules, 1972 before the expiry of the said period of four months, give notice to the Controller of Patents on the prescribed Form 15, of such opposition. The written statement of opposition should be filed along with the said notice or within one month of its date as prescribed in Rule 36 of the Patents Rules, 1972.

"The classifications given below in respect of each specification are according to Indian Classification and International Classification".

A limited number of printed copies of the specifications listed below will be available for sale from the Government of India Book Depot, 8, Kiran Sankar Roy Road, Calcutta, in due course. The price of each specification is Rs. 2/- (postage extra if sent out of India). Requisition for the supply of the printed specifications should be accompanied by the number of the specifications as shown in the following list.

Typed or photo copies of the specifications together with photo copies of the drawings, if any, can be supplied by the Patent Office, Calcutta on payment of the prescribed copying charges which may be ascertained on application to that office. Photo copying charges may be calculated by adding the number of pages in the specification and drawing sheets mentioned below against each accepted specification and multiplying the same by four to get the charges as the copying charges per page are Rs. 4/-.

CLASS : 13-C.

154731.

Int. Cl. B65b 11/00.

SEALING CONTROL SEAM DEVICE OF THERMO-ELASTIC OVERWRAP ON PACPETS.

Applicant : G. D. SOCIETA PER AZIONI, OF VIA POMONIA, 10, BOLOGNA, ITALY.

Inventor : 1. ENZOSERAGNOLI.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 4 Claims

A device for controlling the sealing of wraps made of thermoplastic material, particularly on machines that overwrap, for example, packets of cigarettes in succession along a wrapping line at different operating speed levels, in a plurality of stations in one or more of which are installed sealing contrivances connected to means that cause them to operate with a reciprocating motion, essential features of the said device being that the said means for operating the said sealing contrivances terminate at one single control means for all speed levels and that selector means are provided which are connected to means sensitive to variations in the speed level and which work in conjunction with the said operating means destined to be positioned at a point where the operating means applicable to the operating speed level of the machine are located, so that the time required for the sealing operation stays constant.

Compl. specn. 16 pages. Drgs. 2 sheets.

CLASS : 15-D; 63-D.

154732.

Int. Cl. F16c 41/00.

SUSPENSION BEARING FOR SUPPORTING A TRACTION MOTOR AND TRACTION MOTOR ASSEMBLY INCORPORATING SUCH BEARING.

Applicant : GLADYS DAVIS MILLE, OF 51 WEST SARNIA STREET, WINONA MINNESOTA, 55987, UNITED STATES OF AMERICA.

Inventors : 1. RICHARD JOHN RENK, 2. GEORGE EANI BOLLER.

Application No. 161|Cal|76 filed January 28, 1976.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 29 Claims

A suspension bearing adapted to support a traction motor said bearing comprising :

an arcuate bearing surface sized to engage a shaft adapted to rotate within the bearing;

first lubricant collection means provided in said bearing surface, said means being adapted to retain lubricant squeezed axially outward by the rotation of the shaft and to be engaged by a lubricant expelling member mounted concentrically on the shaft and adapted to rotate therewith;

a drain passage communicating with said first lubricant collection means and adapted to drain off lubricant trapped in said means; and

second lubricant collection means provided in said bearing surface outwardly of said first means and adapted to collect and retain additional lubricant not accommodated by said first lubricant collection means, said second collection means being operatively connected to the first lubricant collection means so that lubricant trapped in the second means can move to the first means and thence to the drain passage for draining off lubricant.

Compl. specn. 17 pages. Drgs. 2 sheets.

CLASS : 70C.

154733.

Int. Cl. C22b 21/00.

**IMPROVEMENTS IN RELATION TO THE PRODUCTION OF ALUMINIUM.**

Applicant : ALCAN RESEARCH AND DEVELOPMENT LIMITED, OF 1 PLACE VILLE MARIE MONTREAL, QUEBEC, CANADA.

Inventor : 1. RAJ KUMAR BHILOTRA KALOO.

Application No. 265/Cal/76 filed February 13, 1976.

Convention date 25th February, 1975 (7919/75) U.K.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

**7 Claims**

A method for the production of aluminium by the electrolytic reduction of alumina characterised in that the alumina fed to the electrolytic reduction cell comprises calcined alumina particles and from 2-50% by weight of granules formed of compacted alumina particles, having a major proportion by weight of particles of a size less than 44 microns, said granules having a size in the range of 5000-150 microns.

Compl. specn. 19 pages. Drgs. 1 sheet.

CLASS : 9-D.

154734.

Int. Cl. C22c 1/00, 21/02.

**A METHOD OF PREPARING A HEAT RESISTANT ELECTRICAL CONDUCTOR ROD OR WIRE.**

Applicant : SOUTHWIRE COMPANY, OF 126 FERTILLA STREET, CARROLLTON, GEORGIA 30117, UNITED STATES OF AMERICA.

Inventors : 1. ENRIQUE HENRY CHIA, 2. FRANK MICHAEL POWERS, 3. KENNETH ERYL CHADWICK.

Application No. 376/Cal/76 filed March 2, 1976.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

**8 Claims**

A method of preparing a heat-resistant electrical conductor rod or wire having a minimum electrical conductivity of sixty-one percent (61%) IACS Characterized by :

(a) alloying from more than 0.15 to 1.00 weight percent silicon from 0.10 to 0.95 weight percent iron with the balance of aluminium containing trace elements selected from the group consisting of copper, manganese, magnesium, titanium, vanadium and zinc wherein the individual concentrations of said trace elements do not exceed 0.05 weight percent and the total concentrations of said trace elements does not exceed 0.15 weight percent;

(b) casting the alloy in a moving mold formed between a groove in the periphery of a rotating casting wheel and a metal belt lying adjacent to said groove for a portion of its length to form a continuous aluminium base alloy bar having iron-aluminium-silicon intermetallic precipitates formed therein; and

(c) hot-rolling the continuous bar substantially immediately after casting while the bar is in substantially that condition as cast to form a continuous rod, said rolling operation breaking-up and evenly dispersing said precipitates throughout the aluminium matrix and forming precipitate particles having a diameter of less than one micron when measured along the transverse axis of said particles.

Compl. specn. 26 pages. Drgs. Nil.

CLASS : 64-B.

154735.

Int. Cl. H01r 9/00.

**DEVICE FOR ASSEMBLY A VERY HIGH VOLTAGE LEAD-THROUGH BUSHING ON THE CASING OF AN ELECTRICAL EQUIPMENT.**

Applicant : ALSTHOM-SAVOISIENNE S. A., OF 25 RUE DES BATERLIERS, 93404 SAINT-OUEN, FRANCE.

Inventors : 1. GUY CLAIRET, 2. NOEL LYS.

Application No. 468/Cal/76 filed March 17, 1976.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

**3 Claims**

Device for assembling a very high voltage lead-through bushing on the casing of electrical equipment, comprising an output box protruding from the casing and acting as a support for the lead-through bushing characterized in that the said output box is fixed to the casing of the equipment by a hinge which, during assembling, of the lead-through bushing, can be manoeuvred to raise the output box in order to bring the axis of the latter into the vicinity of the vertical position and to clear at the base of the said output box a passage making it possible to effect the electrical connecting up of the base of the lead-through bushing to the equipment.

Compl. specn. 8 pages. Drgs. 4 sheets.

CLASS : 9-D; 108-C.

154736.

Int. Cl. C22c 39/46.

**AN IMPROVED PROCESS OR PRODUCING GRAIN-ORIENTED SILICON STEEL.**

Applicant : ALLECHENY LUDLUM INDUSTRIES, INC. OF 2000 OLIVER BUILDING, CITY OF PITTSBURGH, PENNSYLVANIA, 15222 UNITED STATES OF AMERICA.

Inventor : 1. EDWARD GEORGE CHOBY, JR.

Application No. 769/Cal/76 filed May 3, 1976.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

**11 Claims**

In a process for producing grain-oriented silicon steel, which process includes the steps of : preparing a melt of silicon steel; casting said steel; hot rolling said steel; cold rolling said steel; decarburizing said steel; and final texture annealing said steel; the improvement comprising the steps of coating said annealed steel with an aqueous solution comprised of from 4 to 30% phosphate ion, up to 6% magnesium ion, 5 to 34% colloidal silica and 0.15 to 6% hexavalent chromium, heating said coated steel at a temperature of at least 1200°F to cure said coating and cooling said coated steel, said coating placing said steel in tension during said cooling thereof.

Compl. specn. 10 pages. Drgs. Nil.

CLASS : 33-A.

154737.

Int. Cl. B22d 13/02.

**CENTRIFUGAL CASTING MACHINE HAVING A DEVICE FOR PLACING IN POSITION AND AXIALLY MAINTAINING A CORE.**

Applicant : PONT-A-MOUSSON S.A., OF 91, AVENUE DE LA LIBERATION 54 NANCY FRANCE.

Inventor : 1. ROBERT PAUL NEGRE.

Application No. 791/Cal/76 filed May 5, 1976.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

**11 Claims**

A centrifugal casting machine comprising a housing, an open-ended pouring mould mounted to rotate in the housing about an axis, and a device for axially placing and maintaining a core against the open end of the mould, said device comprising a hollow thrust element,

first support means carrying the thrust element and movably mounted relative to the housing so as to permit moving the thrust element between an operative position in which operative

position the thrust element maintains the core against the open end of the mould and allows the inside of the mould to be seen and a withdrawn position in which withdrawn position the thrust element is located laterally to one side of the open end of the mould to allow unhindered access to the open end of the mould, a releasable mechanism capable of engaging the core and holding the core against the thrust element when the thrust element is in said withdrawn position and while the thrust element moves from said withdrawn position to said operative position, means mounted relative to the housing and connected to the first support means for shifting the thrust element between said operative position and said withdrawn position, second support means carrying thereleasable mechanism and movably mounted relative to the housing and independent of and movable independently of the first support means and transversely of the mould axis so as to permit moving thereleasable mechanism between a first position in which position it holds the core against the thrust element in the operative position of the thrust element and a second position in which second position the mechanism is located laterally to one side of the open end of the mould to allow unhindered access to the open end of the mould and through the hollow thrust element when the thrust element is in said operative position and returning the releasable mechanism to said second position, the releasable mechanism being capable of being disengaged from the core when the thrust element is in said operative position and capable of being thereafter moved by said returning means acting on said second support means from said first position to said second position while the thrust element remains in said operative first position, the releasable mechanism being capable, in moving from said second position to said first position, of following the movement of the thrust element from said withdrawn position to said operative position of the thrust element.

Compl. specn. 19 pages. Drgs. 4 sheets.

CLASS : 32-E.

154738.

Int. Cl. C08f 15/04.

GASEOUS PHASE PROCESS FOR THE PRODUCTION OF COPOLYMERS OF PROPYLENE AND BUT-1-ENE.

Applicant : NAPHTACHIMIE S.A., OF TOUR NEPTUNE, LA DEFENSE 1, 20 PLACE DE SEINE, 92400 COURBEVOIE, FRANCE.

Inventors : 1. BERNARD DESVIGNE, 2. JEAN CLAUDE BAILLY, 3. PIERRE MANGIN.

Application No. 867/Cal/80 filed July 29, 1980.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 9 Claims

A continuous process for the production of copolymers of propylene and butene-1, in which the proportion by weight of units derived from but-1-ene is from 10 to 40% and the proportion of isolated ethyl branches with the respect to the total amount of the ethyl branches of the copolymer is at least equal to the square of the proportion of units derived from propylene contained in the said copolymers, characterized in that a gaseous mixture of propylene and but-1-ene is introduced into a fluidisation vessel for admixture in a dry fluidised state with a catalytic system which is stereospecific in the polymerisation of propylene alone and consists essentially of a solid titanium trichloride and one or more organo-metallic compounds of the metals of groups II and III of the Periodic Table of elements, maintaining relatively constant the ratio of monomers introduced into thereaction vessel for polymerisation, and maintaining the fluidised materials in the reaction vessel at a temperature comprised between 50° and 90°C, under pressure of less than 40 bars during the polymerisation reaction.

Compl. specn. 30 pages. Drgs. 1 sheet.

CLASS : 136-E; 152-E.

154739.

Int. Cl. B29g 7/00.

SPRAYABLE COMPOSITION AND METHOD FOR COATING A SUBSTRATE WITH SAID COMPOSITION.

Applicant : FLUOROCOAT, LIMITED, OF BOX 174, AVONDALE, PENNSYLVANIA 19311, U.S.A.

Inventor : 1. JOHN EDWARD BACINO.

Application No. 921/Cal/80 filed August 11, 1980.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 12 Claims

A Sprayable and/or mouldable composition capable of providing a thickness of coating even greater than the 0.009 inch per layer comprising sheared dispersions or suspensions of from 5% to 95% by weight of polytetrafluoroethylene (PTFE) dispersion powder (as hereinbefore defined) and from 95% to 5% by weight of a perfluoroalkoxy (PFA) resin (as hereinbefore defined) in a carrier liquid, wherein the said percentage are based on the total weight of the polytetrafluoroethylene dispersion powder and the perfluoroalkoxy resin which composition may include optionally known fillers.

Compl. specn. 35 pages. Drgs. Nil.

CLASS : 70-C.

154740.

Int. Cl. B01 k 1/00.

A METHOD FOR THE MANUFACTURE OF AN ALKALI METAL HYDROXIDE, CHLORINE GAS AND HYDROGEN GAS.

Applicant : ASAHI KASEI KOGYO KABUSHIKI KAISHA, OF 2-6, DOJIMAHAMA 1-CHOME, KITA-KU, OSAKA-SHI, OSAKA, JAPAN.

Inventors : 1. MITSUO YOSHIDA, 2. HIROYOSHI MATSUOKA.

Application No. 1372/Cal/80 filed December 11, 1980.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 7 Claims

A method for the manufacture of an alkali metal hydroxide, chlorine gas and hydrogen gas by the electrolysis of an aqueous solution of an alkali metal chloride, characterized in that the electrolysis is conducted in an electrolytic cell partitioned by means of a cation exchange membrane into an anode chamber and a cathode chamber, using a perforated plate anode in the anode chamber.

Compl. specn. 27 pages. Drgs. 1 sheet.

CLASS : 89; 205-G.

154741.

Int. Cl. B60c 23/00.

DEVICE FOR INDICATING AIR PRESSURE IN VEHICLE TIRES.

Applicant : BRAJNANDAN SINHA, OF 1 SPOVGRAND, S-951 47 LULEA, SWEDEN.

Inventor : BRAJNANDAN SINHA, (2) SVEN-ERIK TIBERG.

Application No. 336/Cal/81 filed March 27, 1981.

Convention date 27th March, 1980 (348773) Canada.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 5 Claims

A device for indicating change of the pressure in vehicle tires (D1, D2), comprising transducers (G1 and, respectively,

G2), which are located fixed on wheel suspension means, preferably adjacent the respective hub, and continuously affected by the dynamic behaviour of the running wheel, and an electronic unit for releasing a warning signal (L) when the dynamic properties of the wheel depending on its tire pressure pass a predetermined limit, characterized in that the transducers are accelerometers (G1 and G2), which with their outputs are connected to the electronic unit (FD, DVR), which transforms the primary signals ( $k \cdot z_1$  and, respectively,  $k_1 \cdot z_2$ ) received from the accelerometers and decreasing with dropping tire pressure to secondary signals  $u(w_1)$  and, respectively,  $u(w_2)$  and  $u(d_1)$  and, respectively,  $u(d_2)$  expressing the vertical acceleration component valid for the respective tire at a certain frequency or frequency range, which secondary signals are compared either with each other (in  $M_w, M_d$ ) or individually with a reference value, in such a manner, that a change of the difference at such a comparison releases (via I) a warning signal when the difference amounts to a preset value.

Compl. specn. 11 pages. Drgs. 1 sheet.

CLASS : 36-A<sub>1</sub> & 50-E<sub>3</sub>.

154742.

Int. Cl. F25b 31/00.

#### IMPROVED COMPRESSOR HOUSING.

Applicant : TECUMSEH PRODUCTS COMPANY, OF 100 EAST PATTERSON STREET, TECHMSEH, MICHIGAN 49286, UNITED STATES OF AMERICA.

Inventor : 1. DAVID CARL LOWERY.

Application No. 426/Cal/81 filed April 22, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 11 Claims

In a hermetic compressor arrangement for a refrigeration type system, such as home refrigerators, or freezers, air conditioners or heat pumps and water coolers, having a motor-compressor assembly encased and resiliently supported in a compressor housing with the compressor housing in turn mounted within a refrigeration type unit, an improved compressor housing formed as two housing halves which when joined form a generally ellipsoidal inner surface providing a predetermined minimum clearance between the housing inner surface and the encased motor-compressor assembly as well as a predetermined minimum clearance between the housing exterior and proximal parts of the refrigeration type unit, and within the limits of the predetermined clearance having a generally maximized continuous curvature.

Compl. specn. 13 pages. Drgs. 4 sheets.

CLASS : 94-G.

154743.

Int. Cl. B65g 47/78.

#### IMPROVED FEEDER FOR COAL AND LIKE PARTICULATE MATERIALS.

Applicant : REDLER CONVEYORS LIMITED, OF DUD-BRIDGE WORKS, STROUD, GLOUCESTERSHIRE, GL5 3EY, ENGLAND.

Inventors : 1. ERIC WHEELER, 2. GERALD FRANK ARTHUR.

Application No. 431/Cal/81 filed April 23, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 15 Claims

A feeder for carrying coal and like particulate materials comprising in combination a vessel of substantially circular cross section that contains an en-masse conveyor that is constrained to pass through a trough-spaced from the internal wall of said vessel so that material being conveyed from an inlet in said vessel to an outlet in said vessel by said conveyor does not come into rubbing contact with said wall.

Compl. specn. 17 pages. Drgs. 4 sheets.

CLASS : 32-E.

154744.

Int. Cl. C08f 19/00.

#### PROCESS FOR PREPARING COPOLYMERS OF VINYL-AROMATIC MONOMERS WITH ETHYLENICALLY UNSATURATED NITRILES.

Applicant : MONTE ISOM S.p.A., OF 31, FORO BUONAPARTE, MILAN, ITALY.

Inventors : 1. ANDREA DE TOFFOL, 2. NICOLA ANFOSSI, 3. GIANFRANCO VEROLI.

Application No. 702/Cal/81 filed June 29, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 8 Claims

A process for preparing copolymers of vinyl-aromatic monomers with ethylenically unsaturated nitriles, such as acrylonitrile, methacrylonitrile, ethacrylonitrile and mixtures thereof, having a very low content of unreacted residual monomers, by polymerization in an aqueous dispersion, characterized in that, in the final step of the polymerization process, an amount ranging from 0.2% to 2% by weight, referred to the starting monomers, of a third comonomer such as herein described, particularly reactive towards the unreacted monomers is added, when at least 70% of the starting monomers have been converted into polymer, to the aqueous dispersion containing a compound such as herein described, capable of yielding free radicals, the reactive comonomer being selected from the ones which are highly reactive with the monomers, and the copolymer of which has a glass transition temperature as close as possible to the one of the final copolymer.

Compl. specn. 16 pages. Drgs. Nil.

CLASS : 5-D & 1/3-A & B.

154745.

Int. Cl. B05b 1/00.

#### A DEVICE FOR SPRAYING LIQUID BASED CHEMICALS.

Applicant & Inventor : AMITABHA DATTA, 237, JODHPUR PARK, CALCUTTA-700068, WEST BENGAL, INDIA.

Application No. 799/Cal/81 filed July 17, 1981.

Complete specification filed 12th October, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 8 Claims

An electrostatic liquid sprayer/atomizer comprising a liquid storage source for admitting liquid to be atomized to an atomizing unit, said atomizing unit comprising a nozzle for spraying atomized liquid, said nozzle being coupled to a high voltage electro dynamic source at the end of the nozzle in order to atomize the liquid fed thereto.

Compl. specn. 9 pages. Drgs. 1 sheet.

Provisional Specification 3 pages.

CLASS : 80-I.

154746.

Int. Cl. B01d 29/00.

#### BAG-TYPE FILTER WITH AIR DIFFUSER TUBES OF HELICAL CONSTRUCTION.

Applicant & Inventor : ALLEN STARLING JOHNSON, JR., OF 1235 WEST HENDERSON STREET SALISBURY, NORTH CAROLINA, U.S.A.

Application No. 852/Cal/81 filed July 29, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 6 Claims

A filter apparatus of the type having at least one tubular filter bag through which a particulate-laden gas is directed for filtering and retaining the particulate material on the exterior of the bag as the filtered gas is discharged through the outlet end of the bag, wherein the filter bag is supported by a tubular supporting cage positioned within the filter bag, wherein a hollow air diffuser tube extends longitudinally within the tubular supporting cage and is in communication with the outlet end of the filter bag, and the filter bag is cleaned by a periodic reverse purge of air directed into the outlet end of the filter bag so that the hollow air diffuser tube diffuses and distributes the thus directed air so as to more effectively clean the filter bag while also reducing excessive flexing of the filter bag and abrasive wear thereof for substantially increasing the efficiency of the filter apparatus and significantly increasing the life of the filter bag, characterized in that the hollow air diffuser tube is formed from helically wound perforated strip of sheet metal with adjacent edges of the sheet metal strip being interconnected by a seam in which said adjacent edges overlap each other in interlocking relationship and form an imperforate reinforced seam with the seam thus extending helically around the air diffuser tube to structurally reinforce the tube circumferentially and avoid the presence of an air flow obstructing imperforate linear area extending along the length of the tube as in prior art air diffuser tube constructions of convolute form.

Compl. specn. 14 pages. Drgs. 2 sheets.

CLASS : 108C<sub>3</sub>, 154747.

Int. Cl. C21c 5/42.

NOVEL NOZZLE FOR AN OXYGEN INJECTION LANCE FOR DECARBURISATION OF PIG IRON.

Applicant : UGINE ACIERS, OF 10 RUE DU GENERAL FOY 75008, PARIS, FRANCE.

Inventors : 1. JEAN BRANCAZ, 2. GEORGES MARIZY.

Application No. 941|Cal|81 filed August 24, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 3 Claims

A novel nozzle for the decarburisation of molten pig iron by a supersonic oxygen jet, characterised in that it comprises a frustoconical divergent portion having an apex angle of between 60 and 70° provided beyond the neck or constriction on same.

Compl. specn. 16 pages. Drgs. 3 sheets.

CLASS : 34A, 154748.

Int. Cl. C08b 29/00.

"A PROCESS FOR MAKING A CELLULOSE ARTICLE SUCH AS FIBRE OR FILM".

Applicant : AKZONA INCORPORATED, A CORPORATION OF THE STATE OF DELAWARE, U.S.A., OF P.O. BOX 2930, ASHEVILLE, NORTH CAROLINA 28802, UNITED STATES OF AMERICA.

Inventor : CLARENCE CURTIS MCCORSLEY III.

Application for Patent No. 214|Del|79 filed on 30th March, 1979.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

## 6 Claims

A process for making a cellulose article such as fiber or film which comprises :

extruding a solution containing a cellulose dissolved in a tertiary amine N-oxide solvent containing a nonsolvent for cellulose to shape the solution as a film or filament, stretching the film or filament while still a solution to orient the molecules and develop improved physical properties in said cellulose fiber or film, and

precipitating the cellulose from said solution to set the properties thereof without additional drawing.

Compl. specn. 28 pages. Drgs. 1 sheet.

CLASS : 108C 3, 5 & 12c.

154749.

Int. Cl. C21d 9/46

"METHOD OF CONTINUOUS HEAT TREATMENT OF STEEL SHEET".

Applicant : CENTRE DE RECHERCHES METALLURGIQUES-CENTRUM VOOR RESEARCH IN DE METALLURGIE, OF 47 RUE MONTROYER, 1040 BRUSSELS, BELGIUM, A BELGIAN BODY CORPORATE AND COCKE-RILL, OF 4100 SERAING, BELGIUM, A BELGIAN BODY CORPORATE.

Inventors : PHILIPPE PAULUS & MARIOS ECONOMOPOULOS.

Application for Patent No. 689|Del|80 filed on 22nd September, 1980.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

## 8 Claims

A method of continuous heat treatment of steel sheet, in which the sheet is heated to a temperature higher than its recrystallisation temperature and then immersed in an aqueous bath held at a temperature higher than 75°C, whereupon a film of vapour is formed on the surface of the sheet, the throughput speed of the sheet, the temperature of the sheet on its input into the bath, and the length of the path of the sheet in the bath being such that no transition front between presence and absence of the film of vapour attached to the surface of the sheet occurs in the attending path of the sheet in the bath.

Compl. specn. 13 pages.

CLASS : 42A<sub>s</sub>.

154750.

Int. Cl. A24c 5/14.

STRIP GUIDING DEVICE.

Applicant : G. D. SOIETA' PER AZIONI, AN ITALIAN COMPANY, OF 40100 BOLOGNA, VIA POMPONIA, 10, ITALY.

Inventor : ENZO SERAGNOLI.

Application for Patent No. 722|Del|80 filed on 3rd October, 1980.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005

## 6 Claims

A strip guiding device, particularly for the automatic forward movement of at least a strip of paper along a substantially U-shaped path comprising a first and a second end branch connected to one another by an intermediate curved section, at least the said second branch, disposed downstream of the curved section in the direction of advancement, extending, at least partially, along a conveyor device for the forward movement of the said strip, characterized in comprising at least one perforated pulley pivotally mounted about an axis passing through the centre of curvature of the said curved section, at least one chamber having a perforated wall disposed at least along the said second branch in contact with the said conveyor device, and suction means which communicate with the interior of the said pulley and the said chamber; a portion of the periphery of the said perforated pulley defining the said curved section of the path, and the remaining portion of the periphery of the said perforated pulley cooperating in a fluid tight fashion with a fixed cylindrical surface; and the said conveyor device comprising an air permeable ring-shaped belt conveyor.

Compl. specn. 16 pages. Drgs. 2 sheets.

CLASS : 180.  
Int. Cl. F24b 1/00.

154751

**"AN IMPROVED SOLID FUEL STOVE".**

Applicant : COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, RAFI MARG, NEW DELHI-110001, INDIA, AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860).

Inventors : PREM NATH BHAMBI, SATISH KUMAR KHANNA AND AKSHAYA KUMAR SHAHA.

Application for Patent No. 724/Del/80 filed on 4th October, 1980.

Complete Specification left on 4th January, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

**7 Claims**

An improved solid fuel stove comprising a base plate on a support therefor having fixed thereon a set of cylindrical inner and outer perforated sleeves enclosed within an outer most cylindrical heat conserving sleeve, a grate for the solid fuel within the space between the said inner and outer perforated sleeves, a vessel support plate mounted on top the heat conserving sleeve and the outer perforated sleeve, wherein the improvement comprises in that the grate provided is movable in a vertical plane within the said inner and outer perforated sleeves and means are provided for adjustment of the same at a desired level to improve the fuel efficiency of the stove.

(Provisional Specification 6 pages. Drawing 4 sheets).

Compt. specn. 10 pages.

CLASS : 130F.  
Int. Cl. C22b 13/00, 15/00, 19/00.

154752.

**"AN IMPROVED PROCESS FOR THE EXTRACTION OF METAL VALUE OF COPPER, ZINC AND LEAD FROM SULPHUR ORES OR ORES CONCENTRATES".**

Applicant : COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, RAFI MARG, NEW DELHI-110001, INDIA, AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860).

Inventors : LALA BEHARI SUKLA, SARAT CHANDRA PANDA AND PRFULLA KUMAR JENA.

Application for Patent No. 725/Del/80 filed on 4th October, 1980.

Complete Specification left on 4th January, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

**4 Claims**

An improved process for the extraction of metal values of copper, zinc and lead from sulphur ores or ores concentrates thereof comprising admixing the ores with ammonium sulphate subjecting the admixture to roasting and treating the roasted mass to aqueous leaching to obtain copper and/or zinc sulphates in the liquid extracts and lead in the residue.

(Provisional Specification 5 pages).

Complete Specification 7 pages.

CLASS : 39 L.  
Int. Class : C01g, 31/00.

154753.

**IMPROVED PROCESS FOR THE PRODUCTION OF VANADIUM PENTAOXIDE FLAKES FROM VANADIUM BEARING SLAGS.**

Applicant : COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH Rafi Marg, New Delhi-110001, India, an Indian registered body incorporated under the Registration of Societies Act (Act XXI of 1860).

Inventor : AKSHYA KUMAR NAYAK, DULAL BAGCHI, DWARKANATH DATTARAM AKERKAR AND VISHWANATH ANANT ALTEKAR.

Application for Patent No. 733/Del/1980 filed on 8th October, 1980.

Complete specification left on 7th January, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

**9 Claims**

An improved process for the production of vanadium pentoxide flakes from vanadium bearing slags comprising the steps of (a) separating the lumpy metallic from the slags, (b) crushing and grinding the separated slag, (c) mixing the ground slag with sodium salts, (d) roasting the admixed slag, (e) regrinding the roasted mass (f) aqueous leaching the roasted mass (g) separating the solid from the slurry, (h) treating the filtrate to precipitate vanadium pentoxide and drying and fusing the precipitate to obtain the flakes, wherein the improvement comprises in leaching the roasted mass in step (f) with hot aqueous alkali solution and the filtrate obtained in step (g) is acid treated to precipitate the impurities at a pH of 7 to 9 before the same is treated in step (h) for the precipitation of vanadium pentoxide.

(Provisional specification 5 pages)

(Complete specification 11 pages).

CLASS : 72C, 27B.

154754

Int. Class : F42d—7/00, F42b—35/00, E04h—9/00, 5/00, E04b—1/92.

**"BUILDING FOR DETONATING EXPLOSIVES".**

Applicant : DYNO INDUSTRIES A.S., of Nedre Slottsgt. 2, Oslo 1, Norway, a Norwegian Joint Stock Company.

Inventor : HANS HIORTH.

Application for Patent No. 735/Del/80 filed on 8th October, 1980.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

**15 Claims**

A building for the recurrent detonation of explosive charges, characterised by comprising a tube shaped steel structure (2) which together with two gable walls (4) defines a detonation chamber (6) in the centre portion thereof, one or both of said gable walls (4) being apertured by a plurality of openings (12, 14) therethrough and a grating wall (20) or the like provided externally of at least one apertured gable wall (4) and in an end portion of the tube, which grating wall (20) together with the respective adjacent apertured gable wall (4) defines at least one gable chamber (16), said building being effective to obtain a sound damped gas discharge and pressure relief, said tube shaped steel structure (2) being positioned horizontally and freely resting on a sand bed (36) and being covered along the entire length of the tube construction with sand.

(Complete specification 16 pages. Drawing 2 sheets)

CLASS : 6A, 195D.

154755

Int. Class : F03c 1/00.

**"IMPROVEMENTS IN A VALVE SYSTEM FOR ENCAPSULATED MOTOR-COMPRESSOR UNITS".**

Applicant : NECCHI SOCIETA PER AZIONI, of Via Rismondo 78, Pavia, Italy, a company organised under law of the Italian Republic.

Inventor : BAR ALFREDO.

Application for Patent No. 743/Del/80 filed on 10th October, 1980.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.



## 2 Claims

An improved valve system for encapsulated motor-compressor units comprising a cylinder, a piston moving with reciprocating motion in said cylinder, a valve plate which upperly closes said cylinder, a head fixed on to said valve plate, said valve plate defining therein two delivery ports having cross-sections of different size, and a delivery valve positioned over said delivery ports, said delivery valve comprising two pins attached to said valve plate, two laminae, a stop plate for said laminae, a crosspiece and retention spring for said laminae, stopplate, crosspiece, and retention spring being retained by said pins, said two delivery ports creating an asymmetric elastic deformation which favours gradual impact of said valve against said valve plate at the end of the compression cycle.

(Complete Specification 6 pages. Drawing one sheet).

CLASS : 164 A, C.

154756.

Int. Class : C02c 5/00.

**"APPARATUS FOR THE BIOLOGICAL TREATMENT OF WASTE WATER".**

Applicant : C-I-L INC., a corporation of Canada, of 630 Dorchester Blvd. West, Montreal, Quebec, Canada.

Inventor : DAVID CARLETON IRVING POLLOCK.

Application for Patent No. 759/Del/80 filed on 15th October, 1980.

Convention date 26th October, 1979/338540 (Canada).

Appropriate office for opposition proceedings (Rule 4, Patents Rule, 1972) Patent Office Branch, New Delhi-110 005.

## 4 Claims

Apparatus for the biological treatment of waste water including :

- (i) a long vertical shaft bioreactor comprising :
  - (a) an enclosed head tank,
  - (b) a downcomer chamber and a riser chamber communicating with each other directly at their lower extremities and through the head tank at their upper extremities,
  - (c) an influent duct communicating with said riser for supplying influent waste water into said riser,
  - (d) an effluent duct communicating with said riser for removing liquid from said riser, and
  - (e) a gas injector communicating with said riser for injecting oxygen-containing gas into the liquid within said riser and a gas injector communicating with said downcomer for injecting oxygen-containing gas into the liquid within said downcomer.
- (ii) a collection vessel adjacent said head tank,
- (iii) a first venting conduit connecting said head tank to said collection vessel, said first venting conduit extending into said collection vessel so that the outlet of said first venting conduit is immersed in a predetermined depth of liquid in said collection vessel,
- (iv) a second venting conduit connecting said head tank to said collection vessel, said second venting conduit extending into said collection vessel so that the outlet of said second venting conduit is immersed in the liquid in said collection vessel to a greater depth than the outlet of said first venting conduit, and
- (v) an overflow conduit connecting said collection vessel to said influent duct for transferring excess liquid from said collection vessel to said influent duct, and determining the level of liquid in said collection vessel and hence the pressure exerted by the liquid in said collection vessel upon gas vented from said head tank.

(Complete Specification 16 pages. Drawing 2 sheets)  
2-367 GI84

CLASS : 34A.

154757.

Int. Class : C08b 29/00.

**"A SHAPED CELLULOSE ARTICLE".**

Applicant : AKZONA INCORPORATED, a corporation of the State of Delaware, U.S.A., of P.O. Box 2930, Asheville, North Carolina 28802, United States of America.

Inventor : CLARENCE CURITS McCORSLEY III.

Application for Patent No. 903/Del/82 filed on 10th December, 1982.

Divisional to patent application no. 214/Del/79 filed on 30th March, 1979.

Appropriate office for opposition proceedings (Rule 4, Patents Rule, 1972) Patent Office Branch, New Delhi-110 005.

## 10 Claims

A shaped cellulose article of the kind such as herein described, said article having a conditioned tenacity of from 1.4 to 4.7 gpd, a wet tenacity of from 0.5 to 3.7 gpd, and a wet modulus of from 7 to 28 gpd.

(Complete specification 28 pages. Drawing 1 sheet).

CLASS : 40A.

154758.

Int. Class : B01j, 9/00.

**"PROCESS AND APPARATUS FOR THE MIXING OF FLUIDS AND SOLIDS".**

Applicant : IMPERIAL CHEMICAL INDUSTRIES PLC formerly known as IMPERIAL CHEMICAL INDUSTRIES LIMITED, of Imperial Chemical House, Millbank, London SW1P 3 JF, England, a British Company.

Inventor : FREDERICK ROWE.

Application for Patent No. 710/Del/1980 filed on 30th September, 1980.

Convention date 18th October 1979/7936151 (G.B.).

Appropriate office for opposition proceedings (Rule 4, Patents Rule, 1972) Patent Office Branch, New Delhi-110 005.

## 22 Claims

A process for mixing a particulate solid and a fluid such as herein described in a fluidised bed of the solid particles which comprises injecting the fluid into the bed of particles through an orifice which is relatively narrow in comparison with the overall width of the bed, the injected gas stream having imposed upon it an angular velocity which is high in comparison with its linear velocity of injection into the bed.

(Complete specification 16 pages. Drawing 2 sheets).

CLASS : 47 C, E.

154759.

Int. Class : C10b 31/00.

**"METHOD AND APPARATUS FOR PRODUCING COKE".**

Applicant : OTTO-SIMON CARVES LIMITED, a British Company, of Europa House, Bird Hall Lane, Chendle Heath, Stockport, Cheshire, England.

Inventor : DAVID BRIAN CORRY.

Application for patent No. 729/Del/80 filed on 6th October, 1980.

Convention date 12th October 1979/7935523 (U.K.).

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

## 11 Claims

A method of producing coke comprising the steps of supplying pre-heated coal to a coking oven battery by providing a coal pre-heating installation and conveying and/or storage system for the pre-heated coal, supplying inert gas to said system and discharging therefrom a mixture of inert and combustible gases, said discharged gas mixture being passed directly to a gas collecting main of the coking oven battery to which the pre-heated coal is supplied and carbonising said coal in the coking oven battery.

(Complete specification 14 pages. Drawing 1 sheet).

CLASS : 208.

154760

Int. Class : C09d 11/00.

## IMPROVED PROCESS FOR THE MAKING OF BLACK STAMP CANCELLATION INK.

Applicant : COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH, Rafi Marg, New Delhi-110001, India, an Indian registered body incorporated under the Registration of Societies Act (Act XXI of 1860).

Inventor : PRAMOD KUMAR GUPTA, HITENDRA RAI AND HARI SINGH. Application for Patent No. 734/Del/80 filed on 8th October 1980.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

## 5 Claims

Improved process for the making of stamp cancellation ink composition comprising blending a vegetable oil of non-edible grade as a vehicle, a dispersing agent and a pigment by heating and grinding and further blending the paste thus product with terpentine oil to adjust the viscosity of the ink formed to obtain a desired flow time.

(Complete specification 8 pages).

CLASS : 130 I.

154761.

Int. Class : C22b 3/00.

## "AN IMPROVED HYDROMETALLURGICAL PROCESS FOR RECOVERY OF METAL VALUES".

Applicant : UOP INC., a corporation organized in the State of Delaware, with its principal place of business at Ten UOP Plaza, Algonquin and Mt. Prospect Roads, Des-Plaines, Illinois, United States of America.

Inventor : JAMES ALLEN BRADBURY AND RICHARD TAE-SUNG UM.

Application for Patent No. 739/Del/80 filed on 9th October 1980.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005

## 16 Claims

An improved hydrometallurgical process for the recovery of a metal value selected from the group comprising cobalt, copper, manganese, zinc and cadmium, from a metal bearing source which comprises leaching said source with an ammoniacal ammonium salt solution containing from 2% to 25% of ammonia, thereafter contacting said solution with a solid absorbent as herein described which has been soaked in an acid as described herein to selectively absorb dissolved metal ions which have been leached from said source and recovering by a method known *per se* the desired metal value.

(Complete Specification 24 pages. Drawing 1 Sheet).

CLASS : 32F<sub>2</sub> (a).

154762.

Int. Class : C07c 103/04, 103/22.

## "PROCESS FOR THE SYNTHESIS OF UNSATURATED ARYL AMIDES".

Applicant : THE GOODYEAR TIRE & RUBBER COMPANY, a corporation organized under the laws of the State of Ohio, United States of America, having our principal place of business and a post office address at 1144 East Market Street, Akron, Ohio, United States of America.

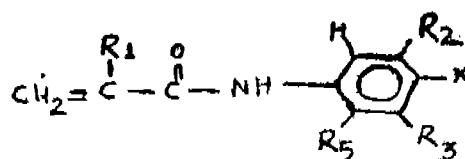
Inventor : DANE KENTON PARKER.

Application for patent no. 741/Del/80 filed on 10th October, 1980.

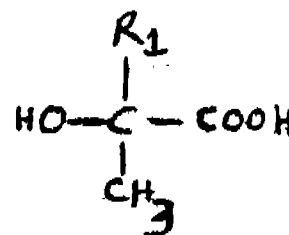
Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

## 6 Claims

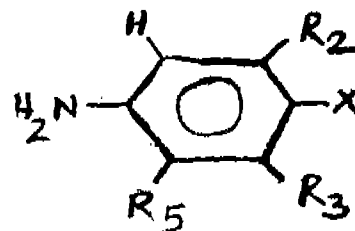
A process for the synthesis of unsaturated aryl amides of general formula IV



comprising (A) reacting an organic acid having the general formula I

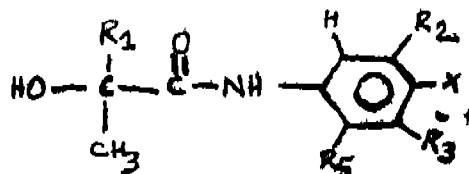


wherein R<sub>1</sub> is selected from the group consisting of hydrogen, methyl or phenyl radicals; with an aryl amine of the general formula II



wherein R<sub>2</sub> is selected from the group consisting of isopropyl, secondary butyl, tert-butyl, terty-pentyl, tert-hexyl, hydrogen, methyl or ethyl; R<sub>3</sub> is selected from the group consisting of isopropyl, secondary butyl, tert-butyl, tert-pentyl, tert-hexyl or hydrogen; R<sub>5</sub> is a radical selected from the group consisting of hydrogen, methyl or ethyl; X is selected from the group consisting of -OH or -NHR<sub>6</sub>; and R<sub>6</sub> is selected from a phenyl radical or an alkyl substituted phenyl radical with one to three same or different alkyl substituents selected

from either methyl or ethyl radicals; to produce a hydroxy aryl amide having the general formula III



wherein  $R_1$ ,  $R_2$ ,  $R_3$ ,  $R_4$ ,  $X$  and  $R_5$  are as defined above and (B) dehydrating in any known manner the hydroxy aryl amide to form an  $\alpha$ ,  $\beta$

unsaturated amide having the general formula IV

wherein  $R_1$ ,  $R_2$ ,  $R_3$ ,  $R_4$ ,  $X$  and  $R_5$  are as defined above.

(Complete specification 13 pages. Drawing 1 sheet).

CLASS : 50F.

154763.

Int. Class : F25b 1/00.

#### "HERMETICALLY SEALED MOTOR COMPRESSOR UNIT FOR REFRIGERATORS".

Applicant : NECCHI SOCIETA PER AZIONI, of Via Rismondo 78, Pavia, Italy, a company organised under law of the Italian Republic.

Inventor : ALFREDO BAR.

Application for patent no. 742/Del/80 filed on 10th October, 1980.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

#### 4 Claims

A hermetically sealed motor compressor unit provided with a compressor shaft of vertical axis for use in a refrigerator, comprising a sealed container and a compressor casing in the form of a casting which incorporates a cylinder, silencer portions upper support means for supporting an electric motor and lower support means for mounting the motor compressor unit inside the sealed container, the unit further comprising a cylinder head, spherical caps mounted to the silencer portions therewith to form silencers which communicate with suction and delivery chambers provided in the head, and a lubricating member disposed at the lower end of the compressor shaft and immersed in a lubricating oil sump which in use is disposed in the container, wherein the casing on its upper portion comprises wall means extending along the periphery thereof and rising to a greater height along at least a first portion of the periphery than along a second portion thereof so as to cause or permit any lubricating oil collected on the upper portion to flow over the second portion.

(Complete specification 7 pages. Drawing 2 sheets).

CLASS : 40E.

154764.

Int. Class : C02c 1/08.

#### "APPARATUS FOR TREATING WASTE MIXED LIQUOR AND METHOD FOR TREATMENT OF ACTIVATED SLUDGE WASTE".

Applicant : C.I.L. INC., a Corporation of Canada of 630 Dorchester Blvd. West, Montreal, Quebec, Canada.

Inventor : DAVID CARLETON IRVING POLLOCK.

Application for Patent No. 758/Del/80 filed on 15th October, 1980.

Convention date 26th October, 1979/338539(Canada).

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

#### 4 Claims

An improved apparatus for treating waste mixed liquor comprising a long vertical downcomer chamber, an adjacent long vertical riser chamber, a surface basin, the said downcomer and riser chambers operatively communicating directly with each other at their lower ends and through the basin at their upper ends to form a circulatory loop, the said downcomer chamber and riser chambers having means for the injection therein at depth of an oxygen-containing gas, a waste influent conduit operatively opening into said riser chamber at a location above the location of the means for injecting oxygen-containing gas into said riser chamber, a treated waste effluent conduit operatively discharging from said riser chamber at a location below the location of means for injecting oxygen-containing gas into said riser chamber, and adjacent to said surface basin a flotation/sedimentation vessel, the improvement comprising a waste influent conduit having its inlet operatively connected to a reservoir located adjacent to said flotation/sedimentation vessel, a treated waste effluent conduit having its outlet operatively connected to said flotation/sedimentation vessel at a position below the normal surface level of liquid in said flotation/sedimentation vessel, the said treated waste effluent conduit being slanting upwardly towards the said flotation/sedimentation vessel, a sludge-receiving trough in contact with an upper edge of the said flotation/sedimentation vessel at a position above the outlet of the said effluent conduit, said trough adapted to discharge into said reservoir, a driven upper skimmer adapted to skim floating solids from the surface of the liquid in the said flotation/sedimentation vessel into said sludge-receiving trough, a baffle means lying generally parallel to and below the surface of the liquid in the flotation/sedimentation vessel, said baffle serving as a beach over which the said upper skimmer passes when skimming sludge into the said sludge trough, a driven submerged scraper adapted to scrape sedimented solids from the bottom of said flotation/sedimentation vessel, a substantially vertical dispersion plate beneath the said baffle and close to said effluent inlet, said dispersion plate being adapted to direct rising dispersed gas bubbles liberated from said waste effluent toward said sludge-receiving trough, a recycle conduit operatively connecting the bottom of the said reservoir to the bottom of said flotation-sedimentation vessel, and rotating plough means within said flotation/sedimentation vessel and adjacent said recycle conduit adapted to direct sedimented solids carried by the said submerged scraper through the said recycle conduit to the said reservoir.

(Complete specification 18 pages. Drawing 2 sheets).

CLASS : 9E.

154765.

Int. Class : C.220.5/00.

#### "A PROCESS FOR THE MANUFACTURE OF TUNGSTEN BASED HEAVY ALLOY".

Applicant : CHIEF CONTROLLER RESEARCH & DEVELOPMENT, MINISTRY OF DEFENCE, GOVERNMENT OF INDIA, NEW DELHI (India), an Indian National.

Inventors : VALLAMPADUGAI SRINIVASARAGHAVAN ARUNACHALAM, NELLYMOOD THOMAS GEORGE, SAMAVEDAM LAKSHMI NARASIMH ACHARYULU, NARAYANA MAITRA, GITTI SHANKER BHATTACHARJEE AND AKSHANTALA VENKATA SAIBABA.

Application for Patent No. 777/Del/1980 filed on 28th October, 1980.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

#### 4 Claims

A process for the manufacture of tungsten based heavy alloy and which consists in preparing a mixture consisting of 89 to 97% of tungsten, 0.5 to 3% of copper, 0.5 to 7.5% of Nickel, 0.5 to 3% of Iron, 0.2 to 1.5% of Cobalt and 0.2 to 1.0% of Mo, subjecting such a mixture to the step of prealloying followed by homogenisation, adding a binder such as comphor to such a mixture which is then subjected to a step of isostatic compaction, and thereafter, subjecting the mixture to the step of sintering.

(Complete Specification 7 pages).

CLASS : 72B.

154766.

Int. Class : C06b 1/04.

"IMPROVED AQUEOUS SLURRY BLASTING EXPLOSIVE COMPOSITIONS AND A METHOD FOR THE PREPARATION THEREOF".

Applicant : IMPERIAL CHEMICAL INDUSTRIES PLC OF IMPERIAL CHEMICAL HOUSE, MILLBANK, LONDON SW1P 3JF, ENGLAND, A BRITISH COMPANY.

Inventor : JAMES ALEXANDER ENEVER.

Application for Patent No. 782/Del/80 filed on 28th October, 1980.

Convention date 5th November, 1979/79.38177(U.K.).

Appropriate office for opposition proceedings (Rule 4, Patents Rule, 1972) Patent Office Branch, New Delhi-110005.

(40 claims)

An aqueous blasting explosive composition comprising an aqueous suspension of water-soluble crystalline oxidising salt consisting predominantly of ammonium nitrate, which salt has been comminuted in a saturated aqueous solution of said salt in the presence of a water-soluble crystal-growth inhibiting surfactant of the kind such as herein described having a hydrophobic portion and a hydrophilic portion in its molecule, in intimate admixture with liquid water-immiscible hydrocarbon fuel sensitizer.

(Complete specification 24 pages).

CLASS : 32F2(b), 55E.

154767.

Int. Class : A61k 21/00, C07d 99/14.

"PROCESS FOR PREPARATION OF DERIVATIVES OF 6 $\beta$ -HYDROXYALKYLPENICILLANIC ACIDS".

Applicant : PFIZER INC., A CORPORATION ORGANISED UNDER THE LAWS OF THE STATE OF DELAWARE, UNITED STATES OF AMERICA, OF 235 EAST 42ND STREET, NEW YORK, STATE OF NEW YORK, UNITED STATES OF AMERICA.

Inventor : MICHAEL STEPHEN KELLOGG.

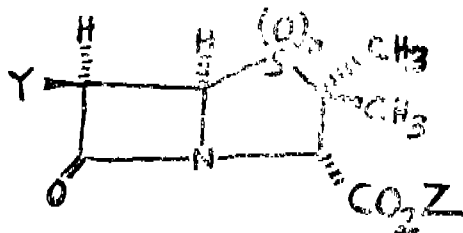
Application for Patent No. 726/Del/83 filed on 31st October, 1983.

Divided out of application for patent No. 736/Del/80, filed on 8th October 1980.

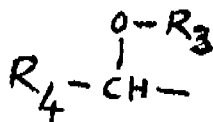
Appropriate office for opposition proceedings (Rule 4, Patents Rule, 1972) Patent Office Branch, New Delhi-110005.

(3 claims)

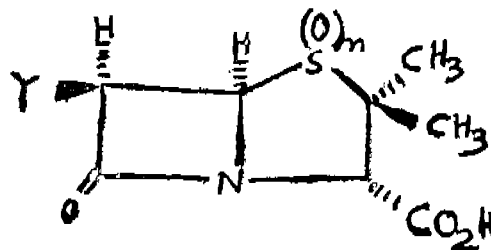
A process for the preparation of a compound of the formula XIV.



where : Y is R or R<sub>2</sub> wherein R is 1-hydroxy-3-phenylpropyl, alkylsulfonyloxymethyl of from one to four carbon atoms in said alkyl group, phenylsulfonyloxymethyl or substituted phenylsulfonyloxymethyl wherein said substituent is methyl, methoxy, fluoro, chloro, bromo or trifluoromethyl R<sub>2</sub> is



wherein R<sub>2</sub> is sulfo, hydrogen, alkoxycarbonyl of from two to four carbon atoms, alkanoyl of from two to eighteen carbon atoms, benzoyl, phenylsulfonyl or substituted benzoyl or phenylsulfonyl wherein said substituent is methyl, methoxy, fluoro, chloro, bromo or trifluoromethyl; R<sub>1</sub> is hydrogen, alkyl of from one to four carbon atoms, phenyl, benzyl or phenethyl; Z is an ester-forming residue readily hydrolyzable *in vivo*; and n is 0 or 2, characterized by reacting the base salt of a compound of the formula XV



wherein Y and n are as herein described, with a compound of the formula



wherein Z is as herein described and X is a halogen, with the proviso that when Y is R, n is 0 and when Y is R<sub>2</sub>, n is 2.

(Complete specification 85 pages. Drawings 3 sheets).

CLASS : 172 C 4.

154768.

Int. Cl. : D01h-5/00.

DEVICE FOR INTERRUPTING THE FEED OF A ROVING TO DRAWING FRAMES.

Applicants : SPENDELFABRIK SUSSEN, SCHURR, STAHLCKER & GRILL G.m.b.H; DAMSTRASSE 1, 7334, SUSSEN, FEDERAL REPUBLIC OF GERMANY.

Inventor : 1. GERD STAHLCKER.

Application No. 19/Bom/1982, Filed January 28, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rule, 1972) Patent Office Branch, New Delhi-110005.

8 claims

Device for interrupting the feed of a roving to the drawing frames of a spinning machine, said drawing frames comprising a plurality of upper and lower drawing rollers arranged in pairs, said device comprising :

a shield located on one of said drawing rollers adjacent the feed side of the roving, said shield being movable from an operative position permitting the movement of said drawing rollers and feed of said roving to an interrupting position interrupting the feeding of said roving,

yarn tracer means for monitoring breaks in yarn being spun at the spinning machine, electrical control means for controlling movement of said shield between said operative and interrupting positions, and means for actuating said electrical control means to automatically move the shield to said interrupting position in response to detection of a broken yarn by said yarn tracer means.

(Complete specification 13 pages; Drgs. 4 sheets).

CLASS : 49 H.

154769.

Int. Cl. : A 47 j-27/09.

IMPROVEMENT IN OR RELATING TO VENT WEIGHTS FOR PRESSURE COOKERS.

Applicants : PRESSURE COOKERS & APPLIANCES LTD., UNITED INDIA BUILDING, PHEROZESHAH MEHTA ROAD, BOMBAY-400 001, MAHARASHTRA, INDIA.

Inventor : NARANAMMALPURAM SANKARAN SUBRAMANIAN.

Application No. 72/Bom/1982, filed March 25, 1982.

Appropriate office for opposition proceedings (Rule 4, Patent Rules, 1972) Patent Office, Bombay Branch.  
4 claims

An improved vent weight for pressure cookers comprising a body in the shape of the frustum of a cone, having a straight axial bore, the diameter of which is large relative to the diameter of the vent tube of the pressure cooker characterized in that the said bore is enlarged at its upper end and providing a chamber inside the vent weight body near its upper end, surrounding the upper end of the vent tube of the pressure cooker and in that at least eight equally spaced vent holes are provided in the body of the vent weight for escape of steam.

(Complete specification 8 pages. Drawing 1 sheet).

CLASS : 189.

154770.

Int. Cl. : A-47-K-17/00.

IMPROVED TONGUE CLEANER.

Applicant : SUBHASH RAMCHANDRA GUPTA, 64, KAILASH PARK, INDORE-452001.

Inventor : MADHYA PRADESH, INDIA.

Application No. 147/Bom/1982, filed June 9, 1982.

Appropriate office for opposition proceedings (Rule 4, Patent Rules, 1972) Patent Office, Bombay Branch.

4 claims

An improved tongue cleaner, which consists of a handle having a transverse strip at its one end, the transverse strip having one or more longitudinal ridges on its one surface.

(Complete specification 5 pages; Drg. 1 sheet).

CLASS : 181

154771.

Int. Cl. : F 16j-15/16.

A SEAL FOR TWO RELATIVELY ROTATABLE ELEMENTS.

Applicants : MARS SEAL PRIVATE LIMITED, 8, AMBALAL DOSHI MARG, FORT, BOMBAY-400 023, MAHARASHTRA, INDIA.

Inventor : CHETAN PRAVINKANT SHUKLA.

Application No. 267/Bom/1982, filed October 13, 1982.

Appropriate office for opposition proceedings (Rule 4, Patent Rules, 1972) Patent Office, Bombay Branch.

4 claims

A seal for two relatively rotatable elements comprising an annular case having a substantially U shaped radial section open forwards, a resilient annular diaphragm having a rear portion fitted in the bottom of said annular case by a rear reinforcing ring, an intermediate portion extending forwards around the axis of rotation and carrying a forward portion emerging from said case, a friction ring fitted on said forward portion by a front reinforcing ring, and a coil compression spring housed in said case between the two reinforcing rings and urging the front friction ring forwards, the intermediate portion of the resilient annular diaphragm being shaped to be deflected with its convexity towards the fluid under pressure to be sealed, when said intermediate portion of the resilient annular diaphragm is subjected to the axial compression caused by the mounting of the seal with its annular case force fitted in a recess of one of the two relatively rotatable elements and its friction ring sealingly abutting a flat bearing surface of the other of said two relatively rotatable elements.

(Complete specification 13 pages. Drawings 2 sheets).

CLASS : 170 B+D.

154772.

Int. Cl. : C11 d-3/00.

A BUILT DETERGENT BAR HAVING IMPROVED PROPERTIES SUCH AS WEAR RESISTANCE AND INCREASED FLEXIBILITY.

Applicants : HINDUSTAN LEVER LIMITED, OF HINDUSTAN LEVER HOUSE, 165/166, BACKBAY RECLAMATION, BOMBAY-400 020, MAHARASHTRA, INDIA.

Inventors : ROGER KENYON AND 2. DAVID ROBERT EYERS.

Application No. 309/Bom/1980, filed October 7, 1980.

Convention date 12-10-1979. uk/7935603/79.

Appropriate office for opposition proceedings (Rule 4, Patent Rules, 1972), Patent Office, Bombay Branch.

9 claims

1. A built detergent bar having improved properties such as improved wear resistance and increased flexibility than known bars comprising :

- (i) from 7% to 45% by weight of a detergent active material and
- (ii) from 50% to 60% by weight of detergent builder material characterised in that the said bar contains mixed filler system made up of from 0.5% to 45% by weight of atleast one, sheet alumino silicate filler and from 2.5% to 57% by weight of atleast one particulate substantially water insoluble filler as herein described, said mixed filler system forming from 10% to 60% by weight of the detergent bar.

Complete specn. 18 pages; Drgs. 6 sheets.

Ind. CLASS : 32 F2b

154773

Int. Cl. C07d-49/38.

Title: PROCESS FOR THE PREPARATION OF 2-CYNOMETHYL BENZIMIDAZOLE.

Applicant : SUDARSHAN CHEMICAL INDUSTRIES LTD., 162, WELLESLEY ROAD, SANGAM BRIDGE, PUNE-411 001, MAHARASHTRA STATE, INDIA.

Inventor : ABRAHAM THOMAS.

Application No. 23/Bom/1981 Filed on January 22, 1981.

Appropriate office for opposition proceedings (Rule 4, Patent Rules, 1972), Patent Office, Bombay Branch.

2 Claims

A process for preparing 2-cyanomethyl benzimidazole as shown in formula (C) appearing in figure 1 of the drawing accompanying the specification, by reacting alkyl cyanoacetate shown in formula (B) where  $R=CH_3$  or  $C_2H_5$ , and o-Phenylene diamine shown in formula (A) characterised in that the reactants are refluxed in a molar ratio of 1 : 1, in an inert solvent e.g. O-di-chlorobenzene, nitro benzene or mono chlorobenzene in the presence of catalytic amount of p-toluene sulphonic acid and the reaction is completed by the azeotropic removal of water and alcohol formed in the reaction for a period ranging from 3 to 6 hours.

Complete Specn. 6 pages.

Drg. 1 sheet.

CLASS : 32F2 (a)

154774

Int. Cl. C07c 103/20.

AN IMPROVED PROCESS FOR THE PREPARATION OF TEREPHTHALIC DIAMIDE.

Applicants : NIRLON SYNTHETIC FIBRES & CHEMICALS LTD, NIRLON HOUSE, 254-B, DR. ANNIE BESANT ROAD, WORLI, BOMBAY 400 025, MAHARASHTRA, INDIA.

Inventor : DR. SUCHET SARAN.

Application No. 64/Bom/1981 filed March 9, 1981.

Complete left after Provisional on 27-2-1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office, Bombay Branch.

#### 4 Claims

An improved process for manufacture of terephthalic diamide by reacting waste polyethylene terephthalate with ammonia characterised in that a solution of polyethylene terephthalate in ethylene glycol is reacted with gaseous ammonia at reflux temperature of the reaction medium and in the presence of Zinc Acetate dihydrate as catalyst optionally in the presence of ammonium chloride as an additional catalyst.

Comp. Specn. 9 pages.

Drg. Nil

Prov. Specn. 7 pages.

Drg. Nil.

CLASS : 154D + 208

154775

Int. Cl. : C 09 d-11/02, 11/08.

Title : A PROCESS FOR THE PREPARATION OF AN IMPROVED NON-TOXIC INK ADAPTED TO BE EMPLOYED AS THE MEDIUM FOR PRINTING SOLUBLE CONTAINERS.

Applicant : MANEKLAL SCIENTIFIC RESEARCH FOUNDATION OF A1, BRIGHTON NO. 1, RUNGTA LANE, OFF NEPEAN SEA ROAD, BOMBAY 400 006 (AN INDIAN COMPANY) MAHARASHTRA, INDIA.

Inventor : COL. GIRI KISHOR LALL (RETD.) OF FLAT NO. 402, "SHIVALA" SHOBANI ROAD COLABA, BOMBAY-400 005, MAHARASHTRA, INDIA.

Application No. 342/Bom/1980 filed November 13, 1980.

Complete after Provisional Left on February 15, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office, Bombay Branch.

#### 4 Claims

A process for the preparation of an improved non-toxic ink adapted to be employed as the medium for printing soluble containers of the kind such as herein described which comprises esterifying a solution of shellac in an organic solvent of the kind such as herein described, continuing the esterification until the esters formed represent approximately 24% by weight of the reaction solution, adding to the reaction solution a predetermined amount of ammonia in order to control and substantially block any further esterification of unesterified shellac remaining in the solution, and finally adding to the mixture thus obtained a predetermined amount of titanium dioxide and sufficient water to produce an ink of the desired flow.

Compl. Specn. 6 pages.

Drg. Nil.

Provisional Specn. 4 pages

Drg. Nil.

Ind. CLASS : 170D

154776

Int. Cl. C11d-13/00.

Title : PROCESS FOR THE MANUFACTURE OF CALCIUM SOAP.

Applicants : HINDUSTAN LEVER LIMITED, OF HINDUSTAN LEVER HOUSE 165/166, BACKBAY RECLAMATION, BOMBAY-400 020, MAHARASHTRA, INDIA.

Inventors : JOHN BERNARD AKERS & 2. JANE ANNIE LITTER. 3. DAVID COLIN PETERS.

Application No. 39/Bom/1981 filed 7 February, 1981.

U.K. convention priority date 13-2-80.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office, Bombay Branch.

#### 5 Claims

A process for the production of calcium soap which comprises subjecting an organic carboxylic acid preferably having 6 to 24 carbon atoms in molecule or its ester or mixtures thereof to saponification with Calcium Hydroxide in a liquid reaction medium characterised in that a dipolar aprotic solvent is used as said liquid reaction medium whereafter Calcium Soap thus produced, is separated from the reaction medium in a known manner and thereafter any excess dipolar aprotic solvent remaining is moved in a known manner.

Complete Specn. 9 pages.

Drg. Nil.

Int. CLASS : 170D

154777

Int. Cl. : C11d-9/00+13/00.

Title : A PROCESS FOR THE PREPARATION OF AN ALKALI METAL SALT OF AN ORGANIC CARBOXYLIC ACID.

Applicant : HINDUSTAN LEVER LIMITED, OF HINDUSTAN LEVER HOUSE 165/166 BACKBAY RECLAMATION, BOMBAY-400 020, MAHARASHTRA, INDIA.

Inventors : 1. JOHN BERNARD AKERS, 2. JANE ANNIE LITTER, 3. DAVID COLIN PETERS.

Application No. 40/Bom/1981 filed February 7, 1981.

UK Convention priority date 13-2-1980.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office, Bombay Branch.

#### 13 Claims

A process for the preparation of an alkali metal salt of an organic carboxylic acid comprising saponifying the corresponding organic carboxylic acid preferably having 6 to 24 carbon atoms in the molecule, its ester or mixtures thereof with a concentrated aqueous solution of alkali metal hydroxide in the presence of an inorganic salt, as hereinbefore described, in a liquid reaction medium, such as acetone, separating the organic acid salts from the reaction mixture in a known manner and removing excess of acetone from the organic salt also in a known manner.

Complete Specn. 18 pages.

Drg. Nil.

CLASS : 39 K+P.

+ 35 B

154778

Int. Cl. : C01b-25/00, C04b-11/00.

AN IMPROVED PROCESS FOR MANUFACTURE OF PHOSPHORIC ACID AND GYPSUM FROM ROCK-PHOSPHATE.

Applicants : THEDHARAMSI MORARJI CHEMICAL CO. LIMITED OF 317-21, DR. DADABHOY NAOROJI ROAD, BOMBAY-400 001, MAHARASHTRA, INDIA.

Inventor : 1. DR. MANOHAR SHRIDHAR VAIDYA, 2. MR. RADHESHYAM VYAS AND, 3. MR. GUJURAJ YALGURDRAJ PUROHIT.

Application No. 59/Bom/1981 filed February 27, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office, Bombay Branch.

#### 2 Claims

A process for the manufacture of phosphoric acid and gypsum from rockphosphate of quality superior to that obtained by conventional process wherein rockphosphate is reacted with a mixture of fluosilicic acid (8% to 12%, preferably above 10%  $H_2SiF_6$ ) and phosphoric acid (containing 18% to 22%, preferably 20%,  $P_2O_5$ ) at a temperature between ambient to  $100^\circ$ , preferably at  $70^\circ C$  for a period of time from 1/2 to 4 (preferably 2) hours until the phosphate and fluorine contents of rockphosphate are solubilised, the reaction mixture being filtered to remove silica and other insoluble impurities, such as gypsum and unreacted rockphosphate, the residue being washed by leach liquors (as hereinbefore defined) of the process and finally with water, the filtrate and the washings being collected

and divided into two unequal portions, designated A and B for reference, the portion B being smaller than A, the portion B containing  $P_2O_5$  equivalent to the  $P_2O_5$  in the rockphosphate sample, the portion B being concentrated under pressure of 10 mm of mercury at the temperature of  $80^\circ C$  when calcium silicofluoride, being insoluble in 45% to 52% of phosphoric acid, is precipitated, the resulting slurry being cooled and filtered to yield the product phosphoric acid in the filtrate, and a residue of solid wet cake of calcium silicofluoride, the cake of calcium silicofluoride and the aforesaid portion A being fed into a crystalliser containing seed crystals of gypsum and sulphuric acid being simultaneously added, the reaction between calcium silico fluoride and sulphuric acid being allowed to take place at a temperature between  $60^\circ$  to  $65^\circ C$  in the crystalliser till gypsum crystals are formed, the resulting slurry being filtered to give product gypsum crystals of a quality superior to that obtained by conventional process the filtrate being recycled to repeat the process with a fresh quantity of rockphosphate.

Complete Specn. 13 pages.

Drg. 1 sheet.

Ind. CLASS : 36 A,

154779

Int. CL : F-16 m 100, Fold-21/00, B03b-11/00.

Title : A METHOD OF MANUFACTURING VERTICALLY SPLITTABLE PUMP CASING FOR PUMP USING DISC TYPE IMPELLER AND VERTICALLY SPLITTABLE CASING PUMP MANUFACTURED BY SAID METHOD.

Applicant : KIRLOSKAR BROTHERS LIMITED, AN INDIAN COMPANY DULY REGISTERED AND INCORPORATED UNDER COMPANIES ACT AND HAVING ITS REGISTERED OFFICE AT UDYOG BHAVAN, TILAK ROAD, POONA-411002, MAHARASHTRA, INDIA.

Inventor : KAILASH CHANDRA BHOOTRA.

Application No. 114/Bom/41 filed on April 28, 1981.

Complete after provisional left on July 28, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972), Patent Office, Bombay Branch.

3 Claims

A method of manufacturing vertically splittable pump casing for pump using disc type impeller comprises the steps of :

- (i) aligning the flanges of two sections or halves to form vertically splittable pump casing with the help of known clamps, each of said flanges on casing halves having carbide like projections in opposed relationship with each other and drilling holes in said projections;
- (ii) hammering-in spring tensioned dowel pins, each pin in the form of tubular body having a longitudinally extending slot and one end thereof being tapered to form a guide, into said corresponding holes in said projections and removing said clamps for carrying out single stage machining operation for center boring of wearing rings forming seat for disc type impeller and impeller shaft, and drilling plurality of spaced holes along the periphery of said aligned flanges for fixing nuts and bolts thereinto;
- (iii) separating the machined pump casings of step (ii) by removing or withdrawing said dowel pins and fixing disc type impeller and impeller shaft within wearing rings;
- (iv) and re-aligning the said split halves of pump casing by hammering-in said split dowel pins first and then fixing nuts and bolts into said spaced holes drilled along the periphery of said flanges on pump casing.

Provisional specn. 6 pages.

Drg. 1 sheet.

Complete specn. 8 pages.

Drg. 1 sheet.

CLASS : 172 D 8

154780

Int. CL : D01 h-1/00.

PLY YARN SPINNING ASSEMBLY.

Applicants : FRITZ STAHLER, JOSEF-NEIDHART-STRASSE 18, D-7347 BAD UBERKINGEN, HALDENSTRASSE 20, D-7334 SUSSEN, WEST GERMANY.

Inventors : 1. HANS STAHLER and 2. HANS BRAXMUEER.

Application No. 221/Bom/1981 filed July 28, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office, Bombay Branch.

29 Claims

Ply yarn spinning assembly comprising :

a drawing unit for drawing silver, at least one hollow spindle arranged downstream of the drawing unit, a binding thread bobbin provided respectively at each of said at least one hollow spindles and having a supply of binding thread thereon for binding the silver passing through the at least one hollow spindle, drawing unit and hollow spindle driving means, thread monitoring means for monitoring the yarn condition at least one position downstream of the drawing unit, and means for swinging open a load-bearing member of the drawing unit to interrupt feeding of silver in response to detection of a malfunction by said thread monitoring means.

Complete specn. 27 pages.

Drg. 4 sheets.

CLASS : 53 A

154781

Int. CL : B 62 j 1/00.

IMPROVEMENTS IN OR RELATING TO BICYCLE SADDLES.

Applicant & inventor : HOMI KAIKUSHRU ERANI, 318 W SENECA, PIERRE, S.D. 57501, U.S.A.

Application No. 185/Bom/1982 filed Jul 21, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office, Bombay Branch.

3 Claims

An improved saddle to support the user of a foot pedal operated machine having a narrow leading portion or horn and a rear or wide trailing end portion, wherein the said horn is essentially cylindrical in shape and free to rotate about its own longitudinal axis.

Complete specn. 7 pages.

Drg. 4 sheets.

CLASS : 143 D2

154782

Int. CL : B 65 b 1/02, 9/00.

DEVICE FOR THE PACKAGING OF POWDER, GRANULATES AND LUMP, PASTY AND LIQUID MATERIALS TO BE PACKAGED BY MEANS OF A TUBULAR FILM.

Applicants : MASCHINENFABRIK FR. NIEPMANN GmbH & Co., BAHNHOFSTRASSE 21, 5820 GEVELSBERG, GERMAN FEDERAL REPUBLIC.

Inventor : IAIN STEWART.

Application No. 206/Bom/1982 filed August 9, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office, Bombay Branch.

10 Claims

A device for the packaging of powder, granulates, and lump, pasty and liquid materials to be packaged by means

of a tubular film which is formed from an endless web of film by a forming shoulder into a tube which is filled with the material to be packaged by means of a filling pipe and subdivided at intervals by transverse closures which are formed in each case by a clamp which is brought against the tubular film transverse to the direction of movement of the latter by two cooperating gathering irons which are brought against the tubular film from opposite sides, the tubular film being deformed to form the narrow neck, characterized by the fact that below the filling pipe (3), there are arranged two turret disks (13, 14) which are driven in uniform rotation in opposite direction to each other, each of them bearing at least one of the gathering irons (11, 12) which cooperate in pairs with each other and are rotatably mounted on the turret disks (13, 14) in such a manner that the gathering irons (11, 12) are always directed transverse to the direction of movement of the tubular film (8).

Complete specification 22 pages.

Drg 7 sheets.

CLASS : 68E<sub>1</sub>

154783

Int. Cl. G 05 f 1/00 H02n 1/00.

#### VAR GENERATORS.

Applicant : WESTINGHOUSE ELECTRIC CORPORATION, OF WESTINGHOUSE BUILDING, GATEWAY CENTER, PITTSBURGH, PENNSYLVANIA 15222, UNITED STATES OF AMERICA.

Inventor : 1. LASZLO GYUGYI.

Application No. 508/Cal/81 filed May 14, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 11 Claims

A VAR generator of the type which provides a controlled conduction path for reactive current between two conductors in an electrical system across which the voltage of said electrical system may deviate from a nominal value comprising capacitance means disposed as part of said conduction path for providing a capacitive component of said reactive current in said conduction path during a predetermined increment of time, inductance means disposed as part of said conduction path for providing an inductive component of said reactive current in said conduction path during a predetermined increment of time, and control means inter-connected with said capacitance means and said inductance means for determining the magnitude of said reactive current required as a function of said deviation of said voltage from said nominal value and for cooperating with said capacitance means and said inductance means to provide said required reactive current except in a predetermined range of deviation of said voltage.

Compl. specn. 26 pages.

Drg. 5 sheets.

CLASS : 141-E

154784

Int. Cl. C 22 b 1/22; F 27 b 21/00.

#### PROCESS FOR THE PRODUCTION OF A SINTER FROM A SINTER MIX.

Applicant : WISTRA GMBH THERMOPROZESSTECHNIK, OF 134 WIESENSTRASSE, 4000 DUSSELDORF-HEERDT, FEDERAL REPUBLIC OF GERMANY.

Inventors : 1. DR. HORST BONNEKAMP, 2. BALDUR SAUER, 3. HEINRICH WOLKEWITZ, 4. GUNTER HEPP, 5. WALTER KRAMER.

Application No. 530/Cal/81 filed May 19, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 13 Claims

Process for the production of a sinter from a sinter mix composed of a known solid fuel and a sintering material,

particularly iron ore, in which the sintering mix is passed underneath an igniting kiln having closed ends and side walls and a closed top, wherein in the igniting kiln hot flue gases are generated above the sintering material and these hot flue gases heat up and ignite the surface of the sintering material by radiation and convection, characterized in that flue gases are introduced into the upper region (having the meaning given hereinbefore) of the igniting kiln from one or more burners operated approximately stoichiometrically whilst into the lower region (having the meaning given hereinbefore) gases are introduced having an excess oxygen content such that a kiln atmosphere results which in the upper region of the igniting kiln is hotter and of diminished oxygen content, whilst in the lower region being cooler and more oxygen-enriched.

Compl. specn. 24 pages.

Drg. 4 sheets.

CLASS : 126-A

154785

Int. Cl. G 01 k 7/00.

#### A DEVICE FOR MEASURING THE TEMPERATURE OF COMBUSTION PRODUCTS.

Applicant : INSTITUT VYSOKIKH TEMPERATUR AKADEMII NAUK SSR, OF KOROVINSKOE SHOSSE, MOSCOW, USSR.

Inventors : 1. INNA ABRAMOVNA VASILIEVA, 2. ALEXANDR SAVELIEVICH URINSON.

Application No. 532/Cal/81 filed May 25, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 3 Claims

A device for measuring the temperature of combustion products, comprising a primary radiation source (1) and an auxiliary light flux source (2), both said sources connected to a power supply (3), modulators (15) and (16) for time separation of the light fluxes from the sources (1) and (2), a means (9) for isolating monochromatic radiation components from said light fluxes, a photo-electronic multiplier unit (13) connected with the means (9) via light guides (14), a dedicated computer (18) electrically coupled with the photo electronic multiplier unit (13) and connected to a display (21), a timer (17) electrically coupled with the modulators (15) and (16) via motors (15') and (16'), a photon coupled pairs (19) and (20) arranged on the modulators (15) and (16) and connected to the dedicated computer (18), the modulator (15) being arranged before the subject under investigation in the direction of light flux travel from the source (1) to the means (9) while the modulator (16) is arranged after the subject under investigation in the direction of light flux travel from the sources (1) and (2) to the means (9).

Compl. specn. 23 pages.

Drg. 1 sheet.

CLASS : 39-P; 40-F.

154786.

Int. Cl. B01j 1/00; C04b 11/00.

#### IMPROVEMENT IN A PROCESS FOR THE MANUFACTURE OF A PLASTER PRODUCT, IN PARTICULAR A CONTINUOUS BAND OR BOARDS, AND APPARATUS FOR CARRYING OUT SAID PROCESS.

Applicant : ISOVER SAINT-GOBAIN, OF 63 RUE DE VILLIERS, 92209, NEUILLY SUR SEINE, FRANCE.

Inventors : 1. ADRIEN DELCOIGNE, 2. JACQUES LANNEAU.

Application No. 618/Cal/81 filed June 8, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.



## 23 Claims

Improvement in a process for the manufacture of a plaster product, in particular a continuous band or boards, preparing a mixture essentially of hydratable calcium sulphate (Plaster) and water, shaping said mixture to a desired shape and hydrating the calcium sulphate to obtain said product, characterised by subjecting the said mixture to thermal drying at a temperature above 150°C, said drying operation being started after the mixture has been shaped and terminated before the end of hydration reaction of the calcium sulphate (Plaster).

Compl. specn. 30 pages. Drgs. 3 sheets.

CLASS : 34-A.

154787.

Int. Cl. D01f 1/00; D01d 9/00.

# PROCESS FOR PRODUCING HYDRATED CELLULOSE TEXTURED YARN AND APPARATUS FOR FORMING SPINNING PACKAGE.

Applicant & Inventors : 1. LJUDMILA VLADIMIROVNA IVANOVA, OF OBLAST, MYTISCHI, ULITSA ADADEMIKA KARGINA, 38, KV. 407, MOSKOVSKAYA, USSR; 2. IVAN GAVRILOVICH SHIMKO, OF ULITSA RUDNEVOI 4113, KV. 24, MOSCOW, USSR; 3. EVSEI MOISEVICH MOGIL'EVSKY, OF KUTUZOVSKY PROSPEKT, 17, KV. 9, MOSCOW, USSR; 4. IVAN VIKTOROVICH GRITSKOV, OF CHERKASSY, ULITSA SVERDLOVA, 10, KV. 2, USSR; 5. LJUDMILA FEDOROVNA SKVORTSOVA, OF CHERKASSY, ULITSA SHEVCHENKO, 244, KV. 52, USSR; 6. IGOR PETROVICH BAKSHEEV, OF PROEZO SHOKATSKOGO, 53, KV. 140, MOSCOW, USSR; 7. PAVEL ANATOLIEVICH RUTVAGIN, OF OBLAST, MYTISCHI, ULITSA LETNAYA 28 KORPUS 2, KV. 140, MOSKOVSKAYA, USSR; 8. VALENTINA IVANOVNA MERZLYAKOVA, OF OBLAST, STANTSIA MAMOTOVSKAYA, PEREULOK MOLODEZHNY 2, KV. 48, MOSKOVSKAYA, USSR; 9. MAYA ILMICHNA TASHKOVA, OF CHERKASSY, ULITSA BYDGOSCHSKAYA 36, KV. 147, USSR; 10. LIYA BORISOVNA FINKEL'SHTEIN, OF OBLAST, MYTISCHI, ULITSA PERVOMAIKSKAYA 23, KV. 17, USSR; 11. ALESEI FEIMOVICH KRASNORODKO, OF OBLAST, ILLIBERTSY, OKTYABRSKY PROSPEKT, 140, KV. 70, MOSKOVSKAYA, USSR.

Application No. 659/Cal/81 filed June 18, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 5 Claims

A process for producing textured hydrated cellulose yarn comprising : voagulation of a spinning solution into an acid-salt solution containing 45 to 85 g/l of sulphuric acid, 260-300 g/l of sodium sulphate and 14-24 g/l of zinc sulphate to give a gel-like thread; twisting the resulting gel-like thread simultaneously with formation of a spinning package, regeneration of hydrated cellulose in the obtained twisted thread by treating thereof with an acid-salt solution containing sodium sulphate, zinc sulphate and sulphuric acid to an average content of the residual xanthate of 1.0 ml by 0.1N iodine solution; preliminary washing of the twisted thread from impurities immediately after said regeneration of hydrated cellulose for a period sufficient for outgassing of said spinning package; the final washing of the resulting thread from impurities, drying of the yarn and untwisting the yarn from the spinning package.

Compl. specn. 32 pages. Drgs. 2 sheets.

CLASS : 39 K

154788.

Int. Cl. C01b 15/02.

# AN IMPROVED PROCESS FOR THE PRODUCTION OF HYDROGEN PEROXIDE FROM ANTHROQUINONE DERIVATIVE.

Applicant : DEGUSSA AKTIENGESSELLSCHAFT, OF WEISSERAUENSTRASSE 9, 6000 FRANKFURT/MAIN, FEDERAL REPUBLIC OF GERMANY.  
3—367 GI84

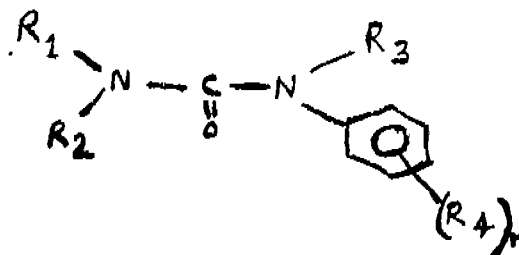
Inventors : 1. DR. GUSTAAF GOOR, 2. DR. WOLFGANG KUNKEL.

Application No. 684/Cal/81 filed June 25, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 5 Claims

An improved process for the manufacture of hydrogen-peroxide in which an anthraquinone derivative as herein described is subjected to known hydrogenation and oxidation alternatively in the presence of a known solvent medium and the hydrogen-peroxide produced during the oxidation removed from the reaction mixture through the use of a tetra-substituted urea characterized by the improvement wherein the said tetra-substituted urea corresponds to the general formula 2 of the accompanying drawings



Formula 8

wherein  $R_1$  is selected from (a) radical with 1 to 12, preferably 1 to 5 C-atoms, which, if necessary, can be substituted by one or several  $OR_s$  radicals,  $R_2$  is H or Alkyl radical with 1 to 12, preferably 1 to 5 C-atoms, where the group  $-OR_s$  may have a position in the middle or at the end of the alkyl of  $R_1$ , or (b) cyclo-alkyl radical with 3 to 7 cyclic C-atoms which radical, if necessary, may be substituted by one or several alkyl radicals with 1 to 5 C-atoms and/or one or more  $OR_s$  radicals, where  $R_s$  is as defined before or (c) aralkyl radical, with which the alkyl groups may possess 1 to 5 C-atoms and with which the aromatic ring itself may be substituted, if necessary, by alkyl groups with 1 to 5 C-atoms and/or  $OR_s$  radicals, with which the aromatic ring itself can be substituted, if necessary, by alkyl groups with 1 to 5 C-atoms and/or  $OR_s$  radicals where  $R_s$  is as defined before  $R_1$  has the same meaning as  $R_1$  as mentioned, where  $R_1$  and  $R_2$  can be identical or non-identical,

$R_1+R_2$  can be connected with one another via a 5- or 6-ring system, which, if necessary, is interrupted by a hetero atom such as N, O, S or P,

$R_3$  corresponds to  $R_2$ , where  $R_2$  and  $R_1$  can be identical or non-identical,

$R_4$  is H and/or has the same meaning like  $R_1$  and  $n$  is a numeral selected from 1 to 5.

Compl. specn. 19 pages. Drgs. 1 sheet.

CLASS : 186-B; 206-B.

154789.

Int. Cl. H04j 3/00.

# TIME DIVISION MULTIPLEX TELECOMMUNICATIONS DIGITAL SWITCHING MODULE AND NETWORK THEREFOR.

Applicant : THE PLESSEY COMPANY PLC., OF VICARAGE LANE, ILFORD, ESSEX IG1 4AQ, ENGLAND.

Inventors : 1. JOSEPH ANTHONY FRENCH, 2. THOMAS SLADE MADDERN, 3. ALEXANDER SCHRODER PHILIP.

Application No. 687/Cal/81 filed June 25, 1981.

Convention dated 25th June, 1980 (2,083,319B) U.K.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 10 Claims

A digital switching module for switching any channel on  $m$  time division multiplex incoming paths each carrying  $n$  digital channels to any channel of  $m$  time division multiplex outgoing paths each having  $n$  digital channels for use in a time division telecommunications switching network comprising a plurality of stages of such modules and each module includes a control store and a data store, the data store being adapted to receive and store in a cyclic manner the time division multiplex channels on the incoming paths in such manner that each individual time division multiplex channel is allocated an individual data store location on a mutually exclusive basis whereas the control store is adapted to be read cyclically in synchronism with the channel appearance on the outgoing paths and each individual location of the control store is adapted to store the identity of the data store location to be used to supply the data for the corresponding outgoing path and channel characterised in that each control store location includes an additional control indicator which when set to a predetermined state causes the contents of the control store location currently being selected to be used to supply the data for the corresponding outgoing path and channel to replace the contents of data store locations.

Compl. specn. 28 pages. Drgs. 7 sheets.

CLASS : 187-C<sub>1</sub>.

154790.

Int. Cl. G08b 11/00; G08c 9/00.

## A MODULAR TELECOMMUNICATION SYSTEM.

Applicant : SIEMENS AKTIENGESSELLSCHAFT, OF BERLIN AND MUNICH, FEDERAL REPUBLIC OF GERMANY.

Inventors : 1. JAMES M. MAJOR, 2. ENRIQUE GUELDNER.

Application No. 741/Cal/81 filed July 4, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 11 Claims

A modular telecommunication system for exchanging data between any pair of a multiplicity of data terminals, said telecommunication system including a plurality of switching blocks and a plurality of interconnecting lines for interconnecting said switching blocks, each of said switching blocks adapted to be connected to a respective group of data terminals and having :

- (a) line terminators each associated with a respective one of said groups of data terminals;
- (b) means connected to said line terminators for controlling local data transfer across real channels from and to said line terminators;
- (c) an interface unit coupling said switching block to a respective one of said interconnecting lines for providing remote data exchange between data terminals associated with different switching blocks, the improvement comprising :

said interconnecting lines including a plurality of individually controlled interlink buses, each being coupled to each of said switching blocks in such a manner that each switching block simultaneously gains access to a respective interlink bus in a time-multiplex mode for transmitting data to a different switching block across virtual channels;

said interface units, each associated with a respective switching block, constituting a plurality of interlink-bus interface units for buffering information received from an interlink bus, each having first parallel inputs and outputs, each being directly connected to a respective one of said interlink buses and having second parallel inputs and outputs; and

a plurality of short distance transmission lines each being associated with one of said interlink-bus interface units and each including a multiplicity of parallel lines each connected to a respective one of said second inputs and outputs, on the one hand, and to

said switching block associated therewith on the other hand for transmitting data and control signals in parallel.

Compl. specn. 86 pages. Drgs. 14 sheets.

CLASS : 129-J.

154791.

Int. Cl. B21b 1/12.

## METHOD AND ROLLING DEVICE FOR ROLLING H-SECTIONS IN CONTINUOUS MILL.

Applicant : 1. URALSKY POLITEKHNIЧЕСКИЙ ИНСТИТУТ ИМЕНИ С. М. КИРОВА, OF SVERDLOVSK, K-2, USSR. 2. ЗАПАДНО-СИБИРСКИЙ МЕТАЛЛУРГИЧЕСКИЙ ЗАВОД ИМЕНИ 50-ЛЕТИЯ ВЕЛИКОГО ОКТЯБРЯ, OF NOVO-KUZNETSK KEMEROVSKOY OBLASTI, USSR.

Inventors : 1. ALESANDR ANDREEVICH KUGUSHIN, 2. VLADIMIR NIKOLAEVICH BESPALOV, 3. BORIS MIKHAILOVICH MELNIKOV, 4. JURY OSIPOVICH LABETSKY, 5. VITALY KUZMICH SMIRNOV, 6. VLADISLAV ALEXANDROVICH SHILOV.

Application No. 798/Cal/81 filed July 16, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 3 Claims

A method for rolling H-sections of metal in a continuous mill, comprising a successive rolling of a rectangular billet in horizontal slitting, horizontal beam and universal beam passes, characterized in that two adjacent open beam passes that follow each edging pass are formed with a maximum horizontal-axis width ratio of a preceding to a following passes of 0.85—0.98, a ratio of the neck widths of the same passes of 0.71—0.95, and a ratio of the flange internal face tapers of 1.02—1.45, the rolling in the horizontal beam passes is conducted in an open passes system, the strip being edged in a vertical pass after each 1 to 3 passings in the horizontal passes.

Compl. specn. 27 pages. Drgs. 2 sheets.

CLASS : 172-D<sub>1</sub>.

154792.

Int. Cl. D01h 9/04.

## BOBBING EXCHANGE APPARATUS ON A RING SPINNING OR RING TWISTING MACHINE.

Applicant : MASCHINENFABRIK RIETER A.G., OF SWITZERLAND, OF WINTERTHUR, SWITZERLAND.

Inventor : 1. PETER OSWALD.

Application No. 843/Cal/81 filed July 27, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 7 Claims

Bobbing exchange apparatus on a ring spinning or a ring twisting machine with a transporting belt, which is provided with a plurality of bobbin holders for taking up bobbin tubes, the mutual distances between the bobbing holders being equal to the spindle gauge of the machine, and which transporting belt extends horizontally in the longitudinal direction of the machine, and, as soon relative to the machine, towards the front is positioned inclined downward, characterized in that supporting means (25, 36, 38) extending are provided which are arranged in front of the bobbing tubes (24) placed onto the bobbing holders (23) and support the bobbing tubes (24).

Compl. specn. 11 pages. Drgs. 2 sheets.

CLASS : 158-Es.

154793.

Int. Cl. B61 f 5/04.

## A BLOSTER FOR USE IN RAILROAD CAR TRUCK.

Applicant : STANDARD CAR TRUCK COMPANY, 332 SOUTH MICHIGAN AVENUE CHICAGO, ILLINOIS 60604, U. S. A.

Inventor : 1. DONALD B. COOLEY.

Application No. 849/Cal/81 filed July 28, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 6 Claims

A bolster for use in a railroad car truck including spring seat areas at the outer ends and a generally central section intermediate the spring seat areas and of substantially greater vertical dimension than the spring seat areas, a vertical reinforcing rib extending from the central section in to the spring seat areas, the central section having slanted bottom walls which merge with bottom walls of the spring seat areas, the spring seat areas and central section being subject to loading in opposite vertical directions thereby creating areas of localized bending stress at the junction of the spring seat bottom walls and central section slanted bottom walls, the improvement characterized by means for reducing such localized bending stress comprising two vertical reinforcing rib means extending from the spring seat areas into the central section and being positioned on opposite sides of said central vertical reinforcing rib, and an opening in said central vertical reinforcing rib in the area of said reinforcing rib means.

Compl. specn. 9 pages. Drgs. 1 sheet.

CLASS : 158-B<sub>2</sub>.

154794.

Int. Cl. B61g 9/12.

## JACING DEVICE FOR REDUCING A DRAFT GEAR TO A COMPRESSED STATE PRIOR TO INSTALLING OR REMOVING A DRAFT GEAR FROM RAILWAY CARS.

Applicant : AMERICAN STANDARD INC., OF 40 WEST 40TH STREET, NEW YORK, NEW YORK 10018, UNITED STATES OF AMERICA.

Inventors : 1. ROGER JAY WESELOH, 2. RUSSELL GEORGE BRANDSMA, 3. JOHN ROBERT HOSHOUR.

Application No. 869/Cal/81 filed August 4, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 14 Claims

A jacing device for reducing a draft gear to a compressed state prior to installing or removing the draft gear into or from railway cars respectively, a draft pocket formed in a railway car center sill in which the draft gear is operably displaceable with one end adjacent an inner end of said pocket for resiliently transmitting buff or draft forces between the coupler and draft gear, said draft gear including a follower axially aligned at the other end thereof opposite said one end, a yoke surrounding the draft gear and by which the coupler may be connected to the draft gear and adapter means for operatively securing said jacking device to the draft gear subsequently to removal of the coupler, said jacking device comprising :

- (a) a cylinder having a closed end in abutting contact with said follower ;
- (b) a ram, including a ram head, reciprocally operable within said cylinder, said cylinder and said ram head cooperating to form there between a pressure chamber within said cylinder;
- (c) a rod portion extending coaxially from the side of said ram head opposite said pressure chamber, said ram head and said rod portion having a bore extending coaxially therethrough with one end opening to said pressure chamber;
- (d) a transverse beam member coaxially secured on the end of said rod portion opposite the ram head;

(e) a pair of locking arms each having one end pivotally secured on said transverse beam member on opposite extremities thereof, extending axially away therefrom, and being pivotally biased angularly outwardly therefrom,

(f) said locking arms being so disposed on said transverse beam and of such length as to be engaged by said adapter means when the jacing device is inserted into said draft pocket and being effective, when said pressure chamber is charged with fluid pressure, for transmitting compression forces to said follower and thereby effecting said compressed state of the draft gear;

(g) conduit means connecting with the other end of said bore opposite its said one end so as to provide passage means via which fluid may be supplied to and pressurized in said pressure chamber; and

(h) checking means for retaining said draft gear in said compressed state during removal or installation thereof.

Compl. specn. 22 pages. Drgs. 5 sheets.

CLASS : 32-E; 40-F.

154795.

Int. Cl. C08f 3/00.

## PROCESS FOR PRODUCING CHLORINATED PVC RESIN.

Applicant : THE B.F. GOODRICH COMPANY, OF 277 PARK AVENUE, NEW YORK, NEW YORK 10017, UNITED STATES OF AMERICA.

Inventors : 1. ALAN JAMES OLSON, 2. ROBERT GERARD VIELHABER.

Application No. 910/Cal/81 filed August 13, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 12 Claims

A process for producing chlorinated poly (vinyl chloride) resin having a density within the range from 1.50 to 1.65 g/cc at 25°C, comprising :

- (a) introducing an aqueous suspension of poly(vinyl chloride) containing from 15 to 35% by wt. poly (vinyl chloride) into a reactor operable under elevated pressure;
- (b) removing essentially all oxygen from said suspension;
- (c) introducing chlorine into the reactor until the pressure there-within is in the range from 25 psig to 100 psig;
- (d) irradiating the poly (vinyl chloride) with ultraviolet light at a level in the range from 2 watts to 50 watts per gallon of said aqueous suspension;
- (e) maintaining a finishing temperature in the range from above 65°C to 120°C during chlorination;
- (f) continuing to introduce chloride into the reactor as the reaction proceeds, so that the pressure in the reactor is maintained substantially constant within said range of pressure;
- (g) stopping flow of chlorine into thereafter when sufficient chlorine has been added to produce a suspension of chlorinated poly (vinyl chloride) having said density upon completion of the reaction; and
- (h) separating solid macrogranular chlorinated poly (vinyl chloride) from said suspension of chlorinated poly (vinyl chloride), and removing aqueous hydrochloric acid present in said suspension of chlorinated poly (vinyl chloride) to obtain a chlorinated poly (vinyl chloride) product characterized by having a heat distortion temperature measured by ASTM Test Method.

D648 which is in the range from 100°C to 135°C.

Compl. specn. 26 pages. Drgs. Nil.

CLASS : 206-G

154796

Int. Cl. H03d 3/00.

## PHASE DISCRIMINATOR CIRCUIT.

Applicant : MITSUBISHI DENKI KABUSHIKI KAISHA, OF 2-3, MARUNOUCHI 2-CHOME, CHIYODAKU, TOKYO, JAPAN.

Inventors 1. SUNAO SUZUKI, 2. GENZABUROU KOTANI.

Applicant No. 929/Cal/81 filed August 20, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 3 Claims

A phase discriminator circuit comprising a circuit for delivering an output when a first and a second AC electric quantity are identical in polarity to each other, a zero shifting circuit for shifting a zero point of said output from said circuit, an integration circuit for integrating an output from said zero shifting circuit, a level detector circuit having a first detecting level and a second detecting level which is lower than said first detecting level, said level detector circuit being responsive to said output from said integration circuit reaching said first detecting level so as to produce an output of a first polarity and being responsive to said output from said integration circuit reaching said second detecting level so as to produce an output of a second polarity, a control circuit which is responsive to said output of said first polarity from said level detector circuit so as to change said first detecting level to said second detecting level and which is responsive to said output of the second polarity from said level detector circuit so as to change said second detecting level to said first detecting level, and a differentiation circuit for changing said output from said integration circuit to a first limit when said output from said level detector circuit changes from its second polarity to its first polarity and for changing said output from said integration circuit to a second limit when said output from said level detector circuit changes from its first polarity to its second polarity.

Compl. specn. 27 pages. Drgs. 5 sheets.

CLASS : 180-C; 36-A.

154797.

Int. Cl. F03b 15/00.

## APPARATUS FOR SWITCHING AN OPERATION OF WATER WHEEL OF PUMP WATER WHEEL.

Applicant : HITACHI, LTD., OF 5-1, MARUNOUCHI 1-CHOME, CHIYODA-KU, TOKYO, JAPAN.

Inventor : 1. KENZU OGIWARA.

Application No. 962/Cal/81 filed August 27, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 1 Claim

An apparatus for switching an operation of a water wheel or a pump water wheel from its spinning-in-air mode into its power generating mode with supplying compressed air into a water wheel chamber to force down the level of water charged in the chamber below the water wheel runner, comprising :

- (a) means such as a detector provided for detecting the head H of the water wheel or the pump water wheel;
- (b) means such as an input processor provided for calculating an input amount  $P_i$  from the detected head H;
- (c) means such as an input/output processor provided for comparing said input amount  $P_i$  with a demanded output  $P_T$  of the Power system;
- (d) means such as a disconnection circuit provided which is responsive to a first comparison result of said comparator means, for disconnecting the motor-generator

from the power system to switch the operation to the generation mode; and

- (e) means such as a non-disconnection circuit provided which is responsive to a second comparison result of said comparator means, for switching the operation to the generation mode without disconnecting the motor-generator from the power system.

Compl. specn. 14 pages. Drgs. 5 sheets.

CLASS : 194-C<sub>01</sub>.

154798.

Int. Cl. : H 01j 61/00.

## LIGHTING SYSTEM.

Applicant & Inventor : JACQUES MARIE HANLET, 3880 LEAR-WOOD DRIVE, LOXA-HATCHEE, FLORIDA 33470, UNITED STATES OF AMERICA.

Application No. 664/Cal/81 filed June 8, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 12 Claims

A lighting system comprising :

(a) cathode means for emitting electrons from an external surface thereof;

(b) first anode means extending internal said cathode means for heating said cathode means thereby emitting said electrons from said external surface;

(c) second anode means positionally located external said cathode means for accelerating said electrons emitted from said cathode means external surface; and,

(d) a bulb member encompassing said cathode means, said first anode means and said second anode means in a substantially hermetic seal, said bulb member having a pre-determined gas composition contained therein, said gas composition atoms being ionized by said cathode means, emitted electrons, said gas composition ionized atoms radiating in the ultraviolet bandwidth of the electromagnetic spectrum, said bulb member being coated with a fluorescent material for intercepting ultraviolet energy responsive to said ionization of said gas composition atoms.

Compl. specn. 37 pages. Drgs. 3 sheets.

CLASS : 72-B.

154799.

Int. Cl. : C 06 b 1/00.

## IMPROVED PERMISSIBLE AQUEOUS BLASTING COMPOSITION.

Applicant : IRECO CHEMICALS, OF SEVENTH FLOOR, KENNECOTT BUILDING, SALT LAKE CITY, UTAH 84133, U.S.A.

Inventors : 1. ALBERT G. FUNK, 2. DANIEL A. WASSON, 3. JOE N. IKEDA.

Application No. 977/Cal/81 filed August 31, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 7 Claims

An improved permissible aqueous blasting composition comprising :

- (a) inorganic oxidizer salt comprising at least 15% by weight calcium nitrate;
- (b) from 10% to 35% by weight water;
- (c) from 0% to 18% inert material;

- (d) sensitizer comprising from 2% to 8% finely flaked aluminium particles; or optionally, a combination of 0.5% to 0.5% finely flaked aluminium particles with 10% to 40% amine nitrate;
- (e) cross-linking and thickening agents which comprise metal ions such as dichromate or antimony ions;
- (f) a minor amount of a gassing agent such as hereinbefore defined, and optionally, from 0% to 20% of water miscible organic liquid.

Compl. specn. 13 pages. Drgs. Nil.

CLASS : 98-F<sub>1</sub> 154800.

Int. Cl. : F16L 59/00 G 01 K 11/00.

PROCESS FOR THE PRODUCTION OF INSULATING PANEL FOR ROOFS AND WALLS.

Applicant : SZ. ALLAMI EPTOIPARI VALLALAT, OF 16, ROSENBERG HP. U., BUDAPEST V, HUNGARY.

Inventors : 1. IMRE BENCSIK, 2. ATTILA BOROS, 3. GABOS CSALA, 4. OLIVER DESSEWFFY, 5. GYORGY SZABO, 6. GABOR VAGO.

Application No. 1043/Cal/81 filed September 19, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

### 5 Claims

Process for the production of insulating panel for roofs and walls, characterized in that agricultural wastewaste with silicic acid content, mainly rice-hull is used as basic material, that is first fiberized, followed by adding first filling material, preferably perlite, or rice-straw, or asbestos to the fiberized and dowaxed rice-hull, and binding material, preferably a two-component synthetic resin-based adhesive and these are mixed to homogenous mixture, then the so-obtained mixture is moulded by passing in template.

Compl. specn. 9 pages. Drgs. Nil.

CLASS : 198-B. 154801.

Int. Cl. : B 03 d 1/00.

PULP AERATOR FOR A FLOTATION CELL.

Applicant : 1. GOSUDARSTVENNY PROEKTNO-KONSTRUKTORSKY I EXPERIMENTALNY INSTITUT PO OBOGATITELNOMU OBOUROVANIJU "GIPROMASHOBOGASCHENIE", OF LENINGRAD, VASILIEVSKY OSTROV, 18 LINIA 49, USSR and 2. VSESOJUZNY NAUCHNO-ISSLEDOVATELSKY I PROEKTNY INSTITUT MEKHANICHESKOI OBRABOTKI POLEZNYKH ISKOPAEMYKH, OF LENINGRAD, VASILIEVSKY OSTROV, 21 LINIA, 8a, USSR.

Inventors : 1. LEONID JUDKOVICH BARCHENKO, 2. NINA NIKOLAEVNA DENEGINA, 3. EVGENY VASILIEVICH ZHUKOV, 4. ALEXEI YAKOVLEVICH IVANENKO, 5. EVGENY PETROVICH KAPRALOV, 6. VIKTOR STEPANOVICH LUCHKOV, 7. ALEXANDR TIKHONOVICH MIROSHNIK, 8. LEONID YAKOVLEVICH SHESTAKOV, 9. VLADIMIR MAXIMOVICH CHICHVAROV.

Application No. 1072/Cal/81 filed September 25, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

### 3 Claims

A pulp aerator for a flotation cell, comprising a shaft carrying an impeller on its lower end, made as a conical head and provided with radial blades, said shaft having a through axial channel for supplying compressed air into the impeller, a stationary hollow tube for pulp circulation, wherein said shaft is concentrically mounted, a disc having a central

opening and radial vanes, attached to the lower portion of the tube normally to its axis, wherein the conical head is open from below, and the radial blades of the impeller are mounted so that one portion of each blade is arranged on the inner surface of the conical head, while the other portion, on its outer surface.

Compl. specn. 12 pages. Drgs. 2 sheets.

Class : 187-E.

Int. Cl. : H 04 r 19/00.

CAPACITIVE PRESSURE TRANSDUCER WITH ISOLATED SENSING DIAPHRAGM.

Applicant : ROSEMOUNT INC., 12001 WEST 78TH STREET, EDEN PRAIRIE, MINNESOTA 55344, U.S.A.

Inventor : I. ROGER LEONARD FRICK.

Application No. 1104/Cal/81 filed October 1, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

### 17 Claims

A capacitive pressure transducer comprising :

a transducer housing;

a sensor housing having a central cavity and being mounted relative to the transducer housing;

diaphragm means supported on said sensor housing and extending across the central cavity to thereby divide the central cavity into two central chambers, said diaphragm means being deflectable under pressure and at least a portion thereof being conductive to provide a first capacitor plate;

each of said central chambers having a conductive surface portion spaced from the diaphragm means for providing second plates of a pair of variable sensor capacitors, each formed with the diaphragm means comprising the first plate;

a pair of isolators, said isolators each having an isolator chamber disposed therein;

separate passageway means for coupling each isolator chamber to a separate one of the central chambers;

means to permit applying separate pressures to the respective isolator chambers at a static line pressure, each isolator chamber, its associated passageway means and connected central chamber enclosing a substantially incompressible fluid, the diaphragm means deflecting and changing the capacitance of the variable sensor capacitors responsive to the differential between the static line pressures in the isolator chambers; and

the sensor housing and the diaphragm means being constructed to warp and to deflect to reduce error in capacitance indicated by the variable sensor capacitors as the diaphragm means deflects in response to the same differential in the static line pressures in the respective isolator chambers but at substantially different static pressure levels.

Compl. specn. 19 pages. Drgs. 4 sheets.

CLASS : 98-I. 154803.

Int. Cl. : H 011 15/02.

A PHOTOVOLTAIC CELL OF IMPROVED STABILITY AND A METHOD FOR MAKING THE SAME.

Applicant : CHEVRON RESEARCH COMPANY, OF 525 MARKET STREET, SAN FRANCISCO, CALIFORNIA, UNITED STATES OF AMERICA.

Inventor : I. LEE F. DONAGHEY.

Application No. 1140/Cal/81 filed October 18, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

### 19 Claims

A photovoltaic cell improved stability comprising a barrier layer containing the metal M<sub>1</sub>, one facial surface of said

barrier layer being in contact with a layer of semiconductor material and forming a photovoltaic hetero-junction therewith, and at least a portion of the other facial surface of said barrier layer in intimate contact with a stabilizing metal electrode!

wherein said stabilizing metal electrode is comprised of at least two metallic elements, one of which is  $M_1$ , such that the tendency of  $M_1$  to diffuse between said stabilizing metal electrode and said barrier layer is approximately zero.

Compl. specn. 24 pages. Drgs. 2 sheets.

CLASS : 129-G. 154804.

Int. Cl. : B 21 c 23/01.

#### AUTOMATED FORMING OR FABRICATING LINE.

Applicant : FIZIKO-TEKHNICHESKY INSTITUT AKADEMII NAUK BELORUSSKOI SSR, OF MINSK, ULITSA ZHODINSKAYA, 4, USSR.

Inventors : 1. ERNEST ALESEEVICH VORONTSOV, 2. EDUARD MATVEEVICH GORBUNOV, 3. VYACHESLAV IOSIFOVICH ERMOLOVICH, 4. VALERY ALEXANDROVICH KLUSHIN, 5. VALERY YAKOVLEVICH SCHUKIN.

Application No. 1160/Cal/81 filed October 20, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 4 Claims

An automated forming or fabricating line as herein defined for metal working comprising a loading device, a forming machine having at least two pairs of forming or shaping tools disposed at opposite sides of a part being formed, a feeding unit for delivering parts into the forming machine, guides for transferring the parts to be formed, and means for distributing the parts among the guides, disposed between the loading device and the feeding unit for delivering parts to the forming machine, the number of the said guides being equal to that of the pairs of forming tools of the forming machine, while the forming tools disposed at one side of the said parts being formed or shaped are arranged so that their end faces adjacent to the start-of-forming zone are shifted in the direction of forming with respect to one another by a length corresponding to the spacing between the guides to allow passage of the parts to the corresponding forming tools.

Compl. specn. 14 pages. Drgs. 2 sheets.

CLASS : 66-B. 154805.

Int. Cl. : F 211 7/00.

#### DRY CELL TORCH WITH ADJUSTABLE FOCUSING HEAD.

Applicant : UNION CARBIDE INDIA LIMITED, OF 1, MIDDLETON STREET, CALCUTTA-700 071, WEST BENGAL, INDIA.

Inventor : 1. JACK NEVILLE JOLLIFFE.

Application No. 1425/Cal/81 filed December 16, 1981.

Complete Specification dated 25th February, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 6 Claims

A dry cell torch with adjustable focussing head comprising a main body, a focussing head pivotally fitted to the said body switching means adapted to connect or disconnect the anode and cathode of one or more dry cell(s), placed within the main body for energisation or disenergisation of a bulb provided within the said focussing head, the said main body being integrally or separately provided with a block having concave or convex surface and the said focussing head having

convex or concave surface at its posterior and corresponding to the said concave or convex surface of the block, said concave/convex surface to be operatively engaged with each other such as to keep the focussing head positioned at different angular positions in relation to the said main body, as desired.

Compl. specn. 9 pages. Drgs. 1 sheet.

Provisional specification 4 pages.

CLASS : 172-A.

154806.

Int. Cl. : D 01 b 13/00.

#### IMPROVED BOBBIN FOR TEXTILE, PARTICULARLY JUTE TEXTILE, MACHINERY.

Applicant : SHALIMAR INDUSTRIES PRIVATE LIMITED, 25 GANESH CHANDRA AVENUE, CALCUTTA-700013, WEST BENGAL, INDIA.

Inventor : 1. ANIL KUMAR KHAITAN.

Application No. 1438/Cal/81 filed December 22, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 4 Claims

A bobbin for textile, particularly for jute textile machinery of the type in which the top disc (or top) thereof is made of timber laminated with textile sheet material there being plurality of alternate layers of each sheet material.

Compl. specn. 6 pages. Drgs. 1 sheet.

CLASS : 37-A.

154807.

Int. Cl. : B 4 c 7/00.

#### CYCLONE SEPARATOR.

Applicant : MITSUBISHI MINING & CEMENT CO. LTD., OF 5-1, MARUNOUCHI 1-CHOME, CHIYODA-KU, TOKYO, JAPAN AND (2) MITSUBISHI JUKOGYO KABUSHIKI KAISHA, OF 5-1, MARUNOUCHI 2-CHOME, CHIYODA-KU, TOKYO, JAPAN.

Inventors : 1. HOROFUMI HATANO, 2. YOJI HIROTA.

Application No. 50/Cal/82 filed January 12, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 6 Claims.

A cyclone separator consisting of a cylindrical body and a reverse conical body fixed in downward in continuation of said cylindrical body, said cylindrical body having a supply opening for fluid containing solid particles and being tangentially connected to said cylindrical body, a discharge hole for the fluid to be discharged which is formed in its upper portion for connection with a fluid discharge pipe and a discharge hole for separated solid particles in the lower part of said reverse conical body, which comprises a guide plate hanging down from the upper portion of the cylinder between said fluid discharge hole and said fluid supply opening for conducting the dischargeable fluid to said discharge hole and the back surface of said guide plate being directed toward said supply side of fluid.

Compl. specn. 12 pages. Drgs. 4 sheets.

CLASS : 129-G.

154808.

Int. Cl. : F 16 b 15/00.

#### NAIL PLUG.

Applicant : TOX-DUBEL-WERK R.W. HECKHAUSEN GMBH & CO. KG., OF D 7762 BODMAN-LUDWIGSHA-FEN, FEDERAL REPUBLIC OF GERMANY.

Inventor : 1. JOSEF RIEDEL.

Application No. 65/Cal/82 filed January 15, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

### 13 Claims

Nail plug comprising a plug body having an external diameter corresponding to the diameter of the bore hole in which the plug is to be fitted and having a central hole for fitting in a nail characterized in that the plug body comprises projections which extend beyond the periphery of the plug body and are made resilient radially and inwardly and are adapted to extend radially outwardly with expanding force which is increased by a nail driven into the body.

Compl. specn. 8 pages. Drgs. 2 sheets.

CLASS : 206-C; 146-D<sub>1</sub>.

154809.

Int. Cl. : H 01 p 3/00.

MULTI-COMPONENT OPTICAL WAVEGUIDE HAVING INDEX GRADIENT.

Applicant : CORNING GLASS WORKS, AT HOUGHTON PARK, CORNING, NEW YORK 14830, UNITED STATES OF AMERICA.

Inventor : 1. DR. ROBERT OLSHANSKY.

Application No. 598/Cal/82 filed May 24, 1982.

Divisional No. 165/Cal/79 dated 23rd February, 1979.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

### 4 Claims

An optical waveguide comprising p glass forming components such as herein described where  $p \geq 3$  and having a core with a radially-graded composition profile and a cladding, the glass forming compounds having a concentration profile  $C_j(r)$  varying substantially as

$$C_j(r) = C_j(a) + \sum_{i=1}^N C_{ji}(r/a) \alpha_i$$

$i=1$   
 $j=1, \dots, p$   
 $i=1, \dots, N$   
 $N \geq 2$ .

where the coefficients  $C_{ji}$  and the  $\alpha_i$  produce reduced pulse dispersion, and where  $C_j(a)$  denote the concentrations at the radius  $a=0$ .

Compl. specn. 31 pages. Drgs. 5 sheets.

CLASS : 70-B.

154810.

Int. Cl. C 23 b 5/00

ELECTROPLATING APPARATUSES.

Applicant : IMPERIAL CLEVITE INC. OF 2550 GOLF ROAD, ROLLING MEADOWS, ILLINOIS, 60008, UNITED STATES OF AMERICA.

Inventors : 1. WAYNE A KRUPER, 2. RALPH R. GREEN.

Application No 763/Cal/82 filed June 29, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

### 20 Claims

An electroplating apparatus comprising :

an anode structure containing a source of plating metal,

at least one agitating vane disposed in a plating cavity disposed adjacent the anode structure;

rotating means for rotating the vane through the plating cavity;

an anode electrical conductor for supplying a positive potential to the anode structure;

a locating means for locating workpieces in a fixed physical relationship with the anode structure so as to form said plating cavity; and,

a cathode electrical conductor for supplying a negative potential to the workpieces to be plated.

Compl. specn. 13 pages. Drgs. 2 sheets.

CLASS : 148-H; 152-E.

154811.

Int. Cl. : C 09 k 3/00.

A METHOD FOR MANUFACTURING A HARDENED COMPOSITION OF EPOXIDE AND TRIARYLSULFONIUM COMPLEX SALT.

Applicant : MINNESOTA MINING AND MANUFACTURING COMPANY, OF 3M CENTER, SAINT PAUL, MINNESOTA 55101, UNITED STATES OF AMERICA.

Inventors : 1. GEORGE HENRY SMITH, 2. PETER MARTIN OLOFSON.

Application No. 1059/Cal/82 filed September 13, 1982.

Divisional No. 116/Cal/79 dated 7th February, 1979.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

### 3 Claims

A method for manufacturing a hardened composition of epoxide and triarylsulfonium complex salt on a substrate characterized in that it comprises the steps of :

(a) disposing in any known manner on a substrate as herein described a photopolymerizable composition comprising (i) organic material having epoxide functionality such as herein described : (ii) an amount of 0.02 percent of 0.15 percent by weight of the complex salt such as herein described based on the weight of said organic material; and

(b) exposing in any known manner said composition to actinic radiation as herein described at an intensity and for a time sufficient to harden said composition.

Compl. specn. 22 pages. Drgs. Nil.

CLASS : 33-A & F.

154812.

Int. Cl. : B 22 c 9/00.

MOLD ASSEMBLY AND METHOD FOR CONTINUOUS CASTING OF METALLIC STRANDS AT EXCEPTIONALLY HIGH SPEEDS.

Applicant : KENNECOTT COPPER CORPORATION, OF 161 EAST 42ND STREET, STATE OF NEW YORK, UNITED STATES OF AMERICA.

Inventors : 1. TERRY FREDERICK BOWER, 2. GEORGE SHINOPULOS, 3. MYRON RONALD RANDLETT.

Application No. 1269/Cal/82 filed October 23, 1982.

Divisional No. 780/Cal/79 dated 27th July, 1979.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

### 5 Claims

Apparatus for continuous, high-speed casting of metallic strands from a melt, said apparatus comprising a generally tubular die extending longitudinally in a first direction and

having a first die end in fluid communication with the melt, wherein the improvement comprises means for cooling such as by water the die at a high rate to form a solidification front in a casting zone of said die spaced longitudinally from said first die end, said cooling means having at least a first cooling means and disposed adjacent the said first die end and immersed in the melt, and means for confining said casting zone to a dimensionally uniform portion of said die and for controlling thermal expansion of said die between said casting zone and said first cooling means end, said means comprising an insulating member structured and positioned adjacent said die to produce a steep temperature gradient in said direction at the lower edge of said casting zone.

Compl. specn. 30 pages. Drgs. 6 sheets

CLASS : 32F<sub>3(b)</sub>+(c), 140B<sub>1</sub>. 154813.

Int. Cl. C07 c 143/38.

#### PROCESS FOR THE PREPARATION OF A SALT OF 2-PHENOXYANTHRA-QUINONE-POLYSULFONIC ACID.

Applicants : MITSUI TOATSU CHEMICALS, INCORPORATED, OF NO. 2-5 KASUMIGASEKI 3-CHOME, CHIYO DA-KU, TOKYO, JAPAN.

Inventors : KATSUYA SAKAI, RYUICHI MITA, TOSHIO KATO, CHOJIRO HIGUCHI, AND HISAMICHI MIRAKAMI.

Application No. 94/Ca/83 filed January 24, 1983.

Divided out of No. 333/Ca/79 dated 3rd April, 1979.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 3 Claims

A process for the preparation of a salt of 2-phenoxyanthraquinonepolysulfonic acid of the general formula II

wherein M is sodium, potassium or an ammonium group and n is an integer of 1 or 2, characterized in that 2-(phenoxyphenyl) benzoic acid is heated at a temperature of from 100 to 200°C together with (a) a dehydrating agent selected from the group consisting of fuming sulfuric acid, sulfuric acid, sulfur trioxide, polyphosphoric acid and phosphorus pentoxide and (b) a sulforating agent selected from the group consisting of fuming sulfuric acid, sulfur acid, sulfur trioxide and chlorosulfonic acid, to effect dehydrating and sulfonation

Compl. specn. 39 pages. Drgs. 8 sheets.

CLASS : 195D. 154814.

Int. Cl. F16k 31/00.

#### SOLENOID OPERATED FLUID PRESSURE CONTROL VALVE.

Applicants : LUCAS INDUSTRIES LIMITED, OF GREAT KING STREET, BIRMINGHAM, B19 2XF, ENGLAND.

Inventor : COLIN PETER BROTHERSTON.

Application No. 1074/Ca/80 filed September 22, 1980.

Convention date 7th December, 1979 (42373/79) U.K.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 7 Claims

A solenoid operated fluid pressure control valve comprising in combination, a body part, a bore formed in the body part and which at one end communicates with an inlet, a cylindrical valve member slidable in and projecting from the other end of said bore, a chamber, defined at the other end of the bore, said chamber communicating with an outlet, a surface in said chamber, said surface being presented to the end of the projecting portion of the valve member, a drilling extending through the valve member and opening onto the end of the valve member presented to the surface, to define a recess having a larger area than the cross-sectional area of the bore, and an armature carried by said valve member the arrangement being such that in use, when electric current flows in

the solenoid the valve member will move to establish an equilibrium position in which the forces acting on the valve member are balanced, the valve forming a restrictor to control the fluid pressure difference between the inlet and the outlet, the degree of restriction being adjustable by varying the current flow in the solenoid.

Compl. specn. 8 pages. Drgs. 2 sheets.

CLASS : 178. 154815

Int. Cl. B28d 5/00.

#### A GEMSTONE CUTTING MACHINE.

Applicants : GERSAN ESTABLISHMENT, OF STADTLE 36, 9490 VADUZ, LIECHTENSTEIN.

Inventor : ERIC JOSEPH BLONDEEL.

Application No. 1184/Ca/80 filed October 16, 1980.

Convention date 16th October, 1979 (35799/79) U.K.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 13 Claims

A gemstone cutting machine comprising support means for a cutting blade, a stone carrier, the support means and the stone carrier being relatively movable so that in use a gemstone carried by the stone carrier can be cut through by a cutting blade supported by the support means, means for relatively moving the stone carrier and the support means wherein the improvement comprises means for sensing the drag force on the gemstone, or a force having a drag force component, or a parameter representative of said drag force or said force, and means responsive to the sensing means for controlling the moving means.

Compl. specn. 14 pages. Drgs. 4 sheets

CLASS : 107 K & G. 154816.

Int. Cl. F02f 1/00.

#### ROCKER HOUSING AND ROCKER COVER

Applicants : CUMMINS ENGINE COMPANY, INC., OF 1000 5TH STREET, COLUMBUS, INDIANA, UNITED STATES OF AMERICA.

Inventors : EDWARD W. KASTING, RICHARD E. GLASSON, AND BRYAN W. SWANK.

Application No. 1395/Ca/80 filed December, 17, 1980.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 19 Claims

A rocker housing for use in an internal combustion engine having a plurality of cylinders, a cylinder head with a plurality of intake and exhaust passages formed therein to permit the flow of gases respectively to and from the cylinders, a plurality of intake and exhaust valve assemblies mounted on the cylinder head to open and close respective intake and exhaust passages formed in the cylinder head, and a rocker arm mechanism in operative engagement with the intake and exhaust valve assemblies to control the flow of gases respectively into and out of the cylinders, said rocker housing comprising a casing shared to at least partially surround the rocker arm mechanism, a means for securing said casing to the cylinder head, an opening formed in said casing to receive air from an external source, and an air collection and distribution means also formed in said casing in fluid communication with said opening to collect air received at said opening and distribute air so collected simultaneously to all of the intake passages formed in the cylinder head.

Compl. specn. 27 pages. Drgs. 9 sheets.



CLASS : 145D. 154817.

Int. Cl. D21f 5/00.

AN APPARATUS FOR FORMING A FIBROUS WEB AND METHOD OF FORMING THE SAID FIBROUS WEB.

Applicants : BELIOT CORPORATION, WISCONSIN 53511, U.S.A.

Inventor : MERLE WAYNE NORTH.

Application No. 8/Cal/81 filed January 3, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 4 Claims

An apparatus for forming a fibrous web comprising :

an imperforate rotatable roll,

a first liquid permeable forming wire, and

a second liquid permeable forming wire.

means for guiding the said first forming wire about a portion of the periphery of said rotatable roll;

means for guiding said second forming wire about the same portion of the said periphery as said first forming wire;

delivery means for delivering a liquid suspension of fibres between the said forming wires as said wires are being received about said portion of said rotatable roll;

an arcuate imperforate roof conforming to the periphery of the said rotatable roll along a limited part of the said portion of the said rotatable roll over which said two forming wires travel;

injection means for injecting pressurized air along the surface of the said roof to form an air film therealong, and;

collector means at the end of the said portion for collecting liquid expelled from the forming wires during their travel along said portion.

Compl. specn. 12 pages. Drgs. 1 sheet.

CLASS : 46B+E. 154818.

Int. Cl. G07f 17/00.

A COIN-FREED WEIGHING AND TICKET ISSUING MACHINE.

Applicants : EASTERN SCALES PRIVATE LIMITED, OF 12, GURUSADAY ROAD, CALCUTTA-700019, W. BENGAL, INDIA

Inventor : JOHN DUNHILL SOMERVILLE.

Application No. 86/Cal/81 filed January 27, 1981.

Complete specification left on May 19, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 10 Claims

A coin freed weighing ticket issuing machine characterised in that it consists of a ticket cage holding a spool of a specified width for accommodating a roll of paper, a means preferably a pusher wheel to advance the said roll of paper by one step a single pace of a specified length on the insertion of a coin of predetermined weight in the slot of the machine, a printing mechanism to print the weight on the end of the roll of paper, a downwardly projection knife of a shearing assembly to shear out the printed end portion of the roll of paper to form the ticket and means to automatically deliver the sheared ticket with the weight recorded thereon through a delivery chute into a box for collection.

Prov. & Compl. specn. 10 pages. Drgs. 1 sheet.  
4—367 GI/84

CLASS : 60B. 154819.

Int. Cl. A41b 9/00.

TIGHTS AND PROCESS FOR MAKING THE SAME.

Applicant : BREILLY S.A., OF 11, RUE CARNOT, 80110 MOREUIL (SOMME) FRANCE.

Inventor : 1. ALFRED BEDIER.

Application No. 186/Cal/81 filed February 18, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 7 Claims

Process for making tights from two hose elements knitted separately on a circular machine with two cylinders of needles, namely a top cylinder and a bottom cylinder, with an elastic belt incorporated therein constituted by an elastic yarn added to the basic yarn, these hose elements being slit by a cut then joined by a seam, whereby the elastic yarn is floated over a large fraction of its length, said process comprising the following steps, for a strip having a width of a few centimeters :

knitting the elastic yarn alone with the needles of the bottom cylinder except the central needle of this strip which is left in rest position, the other needles of the bottom cylinder being left in rest position and all the needles of the top cylinder also being in rest position, knitting the basic yarn alone with all the needles of the top cylinder and of the bottom cylinder,

periodically repeating these operations over the whole height of the elastic belt and terminating the hose element with the basic yarn alone knitted normally with the needles of the two cylinders,

cutting each hose element along the wale which corresponds to the central needle where the elastic thread was not knitted.

Compl. specn. 13 pages. Drgs. 2 sheets.

CLASS : 32E.+40B. 154820.

Int. Cl. C08f 3/00, 15/00,

B01j 11/00.

PROCESS FOR THE PREPARATION OF A SUPPORTED CHROMIUM OXIDE TYPE CATALYST FOR THE POLYMERIZATION OF OLEFINS.

Applicant : STAMICARBON B.V., OF P.O. BOX 10, GELEEN, THE NETHERLANDS.

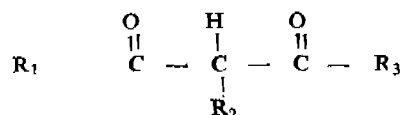
Inventors : 1. LAMBERTUS IOHANNES MARIA AUGUSTINUS VAN DE LEEMPUT 2. GODEFRIDUS ARNOLDUS HENRICUS NOOLLEN 3. HENDRIKUS WILLEM VAN DER LOO.

Application No. 479/Cal/81 filed May 7, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 14 Claims

Process for the preparation of a supported chromium oxide type of catalyst for the polymerization of olefins by bringing the conversion product of a chromium—1, 3- diketo compound and an organometallic compound of a metal from group II or III of the periodic system on an inert inorganic support, specifically on silica, and heating the whole in a non-reducing atmosphere at a temperature of between 200 and 1200°C, characterized in that a chromium- 1, 3- diketo compound with the formula  $\text{Cr}(\text{OCR}_1\text{CR}_2\text{CR}_3\text{O})_3$ , where  $\text{R}_1$ ,  $\text{R}_2$  and  $\text{R}_3$  are the same or different and represent, each of them, in alkyl group with 1- 10 carbon atoms and  $\text{R}_3$  may, moreover, represent a hydrogen atom, and a vanadium chelate or a vanadyl chelate of a 1, 3- diketo compound with the formula



wherein  $R_1$ ,  $R_2$  and  $R_3$  have the aforesaid meanings, are reacted, separately or jointly, with an organometallic compound of a metal from group II or III of the periodic system, in which hydrocarbyl groups with 1-20 carbon atoms are bound, via a carbon atom, to the relative metal, the reaction products are jointly contacted with and deposited on an inert inorganic support and the support with the chromium and vanadium compounds deposited thereon is heated in a non-reducing atmosphere at a temperature of 200 to 1200°C.

Compl. specn. 15 pages. Drg. Nil.

CLASS : 76H, 85J.

154821.

Int. Cl. F23j 1/00.

**A WATER SEAL FOR AN ASH DISPOSAL SYSTEM FOR COAL FIRED OR ASH BEARING FUEL FIRED COMBUSTION CHAMBER.**

Applicant : COMBUSTION ENGINEERING, INC., OF 1000 PROSPECT HILL ROAD, WINDSOR, CONNECTICUT UNITED STATES OF AMERICA.

Inventor : 1. RICHARD FRANCIS MOORE.

Application No. 600/Cal/81 filed June 3, 1981.

Appropriate office for opposition proceedings (Rule 4. Patents Rules, 1972) Patent Office, Calcutta.

### 3 Claims

A water seal for an ash-disposal system for ashes discharged from a coal-fired or other ash-bearing fuel-fired combustion chamber, including opening means in the furnace bottom a tank opened at its upper end and containing water positioned beneath the opening means, into which the ash from the combustion chamber falls, means for removing the ash from the tank, characterised in that the said water seal is provided between the furnace bottom and the tank for sealing the furnace bottom, which plate means completely surrounds the opening means, said plate means having first and second positions, the first position being such that the plate means extend down into the water within the tank which is mounted on wheels at their lower ends, and which plate means form a seal at the upper end around the opening means in the furnace bottom and the second position being such that the tank is located beneath the plate means and the plate means is not in sealing relationship at the upper end with the opening means in the furnace bottom, and means for moving the plate means between the first and second positions.

Compl. specn. 7 pages. Drgs. 2 sheets.

CLASS : 40A1.

154822.

Int. Cl. C08 f 1/06, 3/02.

G01 t 1/00.

**APPARATUS FOR DETECTING SOLIDIFICATION IN A MIXED PHASE CONTAINER.**

Applicant : UNION CARBIDE CORPORATION OF 270 PARK AVENUE, NEW YORK, STATE OF NEW YORK-10017, UNITED STATES OF AMERICA.

Inventors : 1. JOHN MITCHELL JENKINS III, (2) MICHAEL LOUIS GREEN (3) MARVIN EUGENE CAVANDER (4) MAX EDWARD CARTER, SR.

Application No. 648/Cal/81 filed June 16, 1981.

Appropriate office for opposition proceedings (Rule 4. Patents Rules, 1972) Patent Office, Calcutta.

### 10 Claims

An apparatus for detecting solidification in a mixed phase container having volume comprising a radiation source from which radiation passes through a radiation path through at least a portion of the volume of said container to reach at least

one radiation detector suitably located for measuring a decrease in the amount of radiation reaching said radiation detector.

Compl. specn. 12 pages. Drgs. 3 sheets.

CLASS : 19D; 129IG.

154823.

Int. Cl. B21j 15/00.

**METHOD OF AND APPARATUS FOR MAKING A CARRIER OF SIMILAR RIVERS OR LIKE ARTICLE.**

Applicant FUMA MANUFACTURING CO. PTY. LTD., OF 802 BOUNDARY ROAD, COOPERS PLAINS, QUEENSLAND 4108, AUSTRALIA.

Inventor : 1. RALPH FUHRMEISTER.

Application No. 717/Cal/81 filed June 30, 1981.

Convention date 18th July 1980 (PE 4596) AUSTRALIA.

Appropriate office for opposition proceedings (Rule 4. Patents Rules, 1972) Patent Office, Calcutta.

### 9 Claims

A method of making a carrier of similar rivets or like articles including the steps of :

guiding a strip of pliable resiliently deformable material to pass an apertured die,

sequentially driving with a striker each of a number of the articles to the strip to cause the article to stretch and deform part of the strip into the die and subsequently to punch a hole through the stretched part, and to extend through the hole.

withdrawing the striker and the die from the driven article, and

advancing the strip to a position to receive a further one of the articles.

Compl. specn. 10 pages. Drgs. 2 sheets.

CLASS : 15D; 127AB.

154824.

Int. F16b 19/02.

**IMPROVED TAPER BUSH.**

Applicant : J. H. FENNER & CO. LIMITED OF MARF LEET, HULL, NORTH HUMBERSIDE, ENGLAND, HU9 5RA.

Inventors 1. GORDON ALAN HAYHURST. (2) DAVID ANTONY RAYNER.

Application No. 873/Cal/81 filed August 5, 1981.

Convention date 5th August 1980 (8025499) U.K.

Appropriate office for opposition proceedings (Rule 4. Patents Rules, 1972) Patent Office, Calcutta.

### 8 Claims

A tapered, longitudinally-split contractible taper bush for securing pulleys, sprockets, coupling flanges or other machine elements onto cylindrical shafts and utilising a plurality of screws or bolts parallel with the hub axis for effecting wedging of the bush between the hub of the element and the shaft onto which it is mounted, which bush is profiled in the region of its longitudinal slit so that the disposition of metal is such as to compensate for the mass imbalance in both the bush and a co-operating mating hub and thus provide a rotationally balanced system.

Compl. specn. 8 pages. Drg. 1 sheet.

CLASS : 84-B

154825

Int. Cl. : C 10 g 1/02.

**PROCESS OF RECOVERING OIL FROM OIL-CONTAINING MINERALS.**

Applicant : METALLGESELLSCHAFT A. G., of 16 FRANKFURT A.M., RFUTERWEG, WEST GERMANY.

Inventors : 1. NORBERT MAGEDANZ, 2. HORST SEIDEL, 3. DR. HANS JURGEN WEISS.

Application No. 982/Cal/81 filed September 1, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

### 9 Claims

A process of recovering oil from oil-containing minerals by retorting and a separation of oil from the retort gases which contain theretofore products, wherein solid carbon contained in the retorted material after the retorting is burnt by a supply of oxygen containing gases, part of the burnt mineral together with the oil-containing mineral is charged into a retorting shaft reactor and the oil-containing mineral is heated in the mixture to the retorting temperature, characterized in that part of the retorting is effected in a retorting shaft reactor, the mineral from the retorting reactor is charged onto a traveling grate, the remaining retorting is effected in an after-retorting zone, in which inert or reducing gases are passed through the material, the gases from the retorting reactor and from the after-retorting zone are supplied to the separating stage and oil is removed from said gases in the separating stage, the retorted material is moved on the traveling grate to a combustion zone, the solid carbon in the surface of the bed is ignited at the beginning of the combustion zone, oxygen-containing gases are then sucked through the bed to cause the burning zone to move through the bed, the rate at which said oxygen-containing gases are sucked through the bed is so controlled that the bed is heated to the highest temperature attainable by the combustion of solid carbon, the burnt mineral is discharged from the traveling grate and part of the fired mineral is recycled to the retorting reactor.

Compl. specn. 14 pages.

Drg. 1 sheet.

CLASS : 163-D 196-B

154826

Int. Cl. : E 06 b 7,08; F 24 f 13,06, 13,08.

### A DIRECTIONAL OUTLET ASSEMBLY.

Applicant : CARDIFFAIR PTY. LIMITED, OF 47, MANILA STREET, EAST BRISBANE, QUEENSLAND, AUSTRALIA.

Inventor : 1. RAYMOND STANLEY CARDIFF.

Application No. 1015/Cal/81 filed September 9, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

### 10 Claims

A directional air outlet assembly including a support frame supporting a plurality of blade assemblies each having a multiplicity of blades which in use deflect air flow through the respective said blade assembly to exist therefrom in a respective selected direction and at least one said blade assembly being provided with flow adjustment means.

Compl. specn. 11 pages.

Drg. 4 sheets.

CLASS : 129-A, J & G

154827

Int. Cl. : B 21 d 11/00.

### APPARATUS FOR COILING METAL STRIPS.

Applicants & Inventors : 1. DAVID ISAKOVICH OKUN, OF KRAMATORSK, DONETSKOI OBLASTI, ULITS VOZNESENSKOGO, 25, KV. 14, USSR; 2. IOSIF ISAAKOVICH KAGANOVSKY, OF KRAMATORSK, DONETSKOI, OBLASTI, ULITS KATERINICHA, 18, KV. 9, USSR.

Application No. 132/Cal/82 filed February 3, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

### 5 Claims

An apparatus for coiling metal strips, comprising a housing, a drum rotatably mounted in the housing, having

a free end supported on a swing support and including a hollow shaft with expandable segments; a power-actuated rod extending coaxially in the shaft for axial movement with respect to the shaft and connected to said expandable segments through wedge members mounted on the shaft; a thrust member arranged within the housing on the drum shaft for axial reciprocating movements with respect to the shaft and provided with a lock mechanism for being immobilized on the shaft and connected with the rod actuator by means of a member interacting with said thrust member while the drum is being set to a -expanded position; a sleeve freely mounted inside the housing on the shaft, rigidly secured on the rod and interacting with the actuator for moving said rod as the drum is being set to a retracted position; a set of compression springs arranged within the housing in a position concentric with the shaft of the drum and abutting said thrust member at one side thereof while at the other side abutting said sleeve.

Compl. specn. 30 pages.

Drg. 6 sheets.

CLASS : 127-G

154828

Int. Cl. F 16 h 1/38.

### VARIABLE LEVERAGE BEVEL GEARING SYSTEM.

Applicant : FAIRFIELD MANUFACTURING COMPANY, INC., AT U.S. 52 SOUTH LAFAYETTE, IN 47902, UNITED STATES OF AMERICA.

Inventor : 1. THOMAS MARVIN McCRAW.

Application No. 620/Cal/82 filed May 31, 1982.

Division of Application No. 1185/Cal/79 dated 14th November, 1979.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

### 3 Claims

A variable leverage bevel gearing system including in combination a housing, first and second side gears each having bevel teeth and each being rotatively mounted in said housing, at least one pinion having bevel teeth and being rotatively mounted in said housing, the bevel teeth of said pinion being in meshing engagement with said bevel teeth of said first and second side gears, said side gear bevel teeth and said pinion bevel teeth having lines of contact, said lines of contact having midpoints which coincide with a given plane of rotation of each of said side gears.

Compl. specn. 9 pages.

Drg. 3 sheets.

CLASS : 32-F<sub>2</sub> b

154829

Int. Cl. : C 07 d 99/00.

### NOVEL 7 & METHOXYCEPHALOSPORINS AND PROCESS FOR PRODUCING THE SAME.

Applicant : TOYAMA CHEMICAL CO., LTD., OF 2-5, 3-CHOME, NISHIJINJUKU, SHINJUKU-KU, TOKYO, 160, JAPAN.

Inventors : 1. ISAMUSAIKAWA, 2. SHUNTARO TAKANO, 3. HIROYUKI IMAIZUMI, 4. ISAMU TAKAKURA, 5. HIROKAZU OCHIALI, 6. TAKASHI YASUDA, 7. HIDEO TAKI, 8. MASARU TAI, 9. TUTAKA KODAMA.

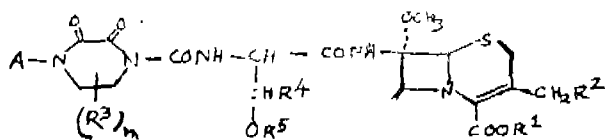
Application No. 651/Cal/82 filed June 7, 1982.

Division of Application No. 1014/Cal/79 dated 26th September, 1979.

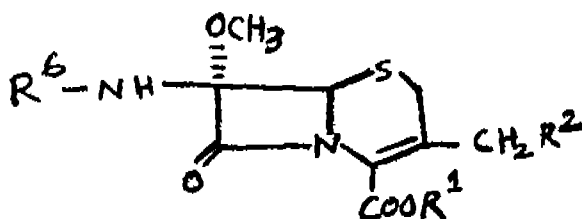
Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 15 Claims

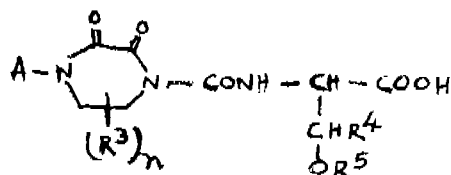
A method for producing a 7  $\alpha$ -methoxycephalosporin represented by the general formula (I)



or a pharmaceutically acceptable salt thereof wherein  $R^1$  represents a hydrogen atom or a carboxyl-protecting group as herein described  $R^2$  represents an organic group linked through an oxygen or sulfur atom as herein described;  $R^3$  represents a lower alkyl group as herein described;  $n$  is 0, 1 or 2;  $A$  represents a substituted or unsubstituted alkyl group; as herein described  $R^4$  represents a lower alkyl group; and  $R^5$  represents a hydrogen atom or a hydroxy-protecting group, which comprises reacting at temperature in the range of  $60^\circ\text{C}$  to  $80^\circ\text{C}$  a compound of the general formula (II)



wherein  $R^6$  represents a hydrogen atom, an organic silyl group or organic phosphorus-containing group as herein described and  $R^1$  and  $R^2$  have the same meaning as defined above, with a compound represented by the general formula (III)



wherein  $A$ ,  $R^3$ ,  $R^4$ ,  $R^5$  and  $n$  have the same meanings as defined above or a reactive derivative in the carboxyl group of said compound III, the pharmaceutically acceptable salts being obtained in a conventional manner.

Compl. specn. 54 pages.

Drg. 2 sheets.

CLASS : 182-B

154830

Int. Cl. : C 13 k 1/00.

A PROCESS FOR PRODUCING A SYRUP OF HIGH DEXTROSE.

Applicant : CPC INTERNATIONAL INC., OF INTERNATIONAL PLAZA, ENGLEWOOD CLIFFS, NEW JERSEY 07632, U.S.A.

Inventors : 1. MASAKI TAMURA, 2. MIZUHO SHIMIZU, 3. MINORU TAGO.

Application No. 1413/Cal/82 filed December 6, 1982.

Division of Application No. 913/Cal/79 dated 1st September, 1979.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 3 Claims

A process for producing a syrup of high dextrose content by saccharifying a liquefied starch to dextrose by means of the glucoamylase enzyme produced by culturing cells of a strain of *Talaromyces dupontii*.

Compl. specn. 18 pages.

Drg. 3 sheets.

CLASS : 131-B<sub>a</sub>

154831

Int. Cl. : E 21 b 41/00.

A METHOD FOR PREPARING DRILLING MUD, PULP AND SUSPENSION HAVING EVEN DISTRIBUTION, CONCENTRATION AND FINENESS OF THE SOLIDS IN THE LIQUID.

Applicant : SREDNEAZIATSKY NAUCHNO-ISSLEDOVATELSKY INSTITUT PRIRODNOGO GAZA, OF TASHIKENT, ULITSA T. SHEVCHENKO, 2, USSR.

Inventors : 1. STANISLAV AFANASIEVICH ALEKHIN, 2. VITOLD MIKHAILOVICH RAKHIR, 3. RAISA IVANOVNA BORN, 4. TATYANA MIKHAILOVNA BAKHIR.

Application No. 152/Cal/80 filed February 8, 1980.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 4 Claims

A method for preparing drilling mud, pulp and suspension having when distribution, concentration and fineness of the solids in the liquid to provide a uniform product which comprises dispersing the solids in the liquid (in the usual manner) by cavitation phenomena using a dispersing, allowing the mineral salt ions such as sodium, calcium and potassium ions contained in the solid to dissolve in the liquid, continuing the dispersing activity until the said ions are sufficiently dissolved in the liquid thereby to provide an increased mineralization value in said dispersion, continuing the dispersing activity further such that the greater part of the solids is converted to colloidal state and the said dispersion attains a steady mineralisation value and thereby has optimum concentration of fine particles.

Compl. specn. 13 pages.

Drg. 1 sheet.

CLASS 39 C

154832

Int. Cl. : B 01 j 2/02; C 01 c 1/18.

PROCESS FOR PRODUCTION OF ANTI-CAKING PRILLED AMMONIUM NITRATE.

Applicant : SUMITOMO CHEMICAL COMPANY LIMITED, OF 15, KITAHAMA 5-CHOME, HIGASHI-KU, OSAKA, JAPAN.

Inventors : 1. OSAMU OGUNI, 2. KENZI SAITA, 3. HISATOSHI SAKAMOTO, 4. NORIYUKI YAMASHITA.

Application No. 440/Cal/80 filed April 16, 1980.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 7 Claims

A process for producing anti-caking prilled ammonium nitrate, which comprises mixing an alkylamine having 6 to 20 carbon atoms, a higher fatty acid having 6 to 20 carbon atoms and a hydrocarbon oil having a melting point of not higher than  $20^\circ\text{C}$  and a boiling point of not lower than  $150^\circ\text{C}$ , to prepare an anti-caking agent, heating the anti-caking agent to a temperature between a melting point thereof and  $120^\circ\text{C}$  and then spray-adding the resulting melt to prilled ammonium nitrate, the molar ratio of the alkylamine to the higher fatty acid being 0.7 to 5 : 1, and the amount of the hydrocarbon oil being 10 to 60% by weight based on the weight of the anti-caking agent.

Compl. specn. 16 pages.

Drg. 2 sheets.

CLASS : 69 E

154833

Int. Cl. : H 01 b 3/00

## ELECTRICAL DISCONNECTING MECHANISM.

Applicant : KIEPE ELEKTRIK GMBH, OF THORNER STR. 1, 4000 DUSSELDORF, WEST GERMANY.

Inventors : 1. RUDOLF DIWISCH. 2. WALTER HARTELEIB.

Application No. 847/Cal/80 filed July 24, 1980.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 8 Claims

An electrical disconnecting mechanism operable for example by an emergency snatch-cord, comprising a housing containing a control switch which can be actuated by an actuator lever moving a cam roller, characterised in that the actuator lever (3) is rotatably mounted on a shaft (5) for the cam roller upon which is also mounted a transmission lever (6) which through at least one slider hinged thereto, is connected to two strikers (8, 9) which engage each in a cut-out portion (10, 11) mounted diametrically opposite to each other on a striker disc (12) mounted on the said shaft. The said two cut-outs each being provided with a stop face (10a, 11a) the stop faces together being effective in the same direction of rotation of the striker disc, the said cut-outs and the distances of the said strikers from the hinge of the said slider(s) on the transmission lever (6) being selected so that in the switched-on position of the cam roller (4) both strikers rest against the stop faces of the cut-outs, and between the housing and a mounting (15) arranged on the said shaft a spring means (10) is provided which, upon the rotation of the striker disc through a predetermined angle by the movement of the strikers on the stop faces the cam roller is rotated with a snap action into the disconnected position, in which position the strikers can then slide freely in the said cut-outs.

Compl. specn. 11 pages.

Drg. 3 sheets.

CLASS : 129 P &amp; G

154834

Int. Cl. : B 23 b 9/00, G 05 b 10/00.

## MACHINE TOOLS.

Applicant : G. B. TOOLS & COMPONENTS EXPORTS LIMITED, OF 368 EALING ROAD, ALPERTON, WEMBLEY, MIDDLESEX HA0 1HD, ENGLAND.

Inventors : 1. WALTER GLYN EDWARDS, 2. ROBERT JOHN HOLDSWORTH WINTERBOTTOM.

Application No. 772/Cal/81 filed July 10, 1981.

Convention date 12th July 1980 (8022860) U.K.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 25 Claims

A machine tool for machining a rotating workpiece comprising a movable tool holder and a control apparatus for generating signals corresponding to required tool movements for the production of a predetermined profile on the workpiece, and a servo system for translating the control signals into tool movements the servo system comprising a low-inertia high-torque motor for receiving the control signals and having an output shaft which is rotated by the control signals by a maximum of less than a revolution and whose instantaneous angular position within said revolution corresponds to the instantaneous value of the control signal, and a single element drive transfer member on the shaft acting directly on the tool holder for translating angular movements of the output shaft into corresponding movements of the tool holder.

Compl. specn. 39 pages.

Drg. 6 sheet.

CLASS : 71 D & G; 131 A<sub>2</sub> & B<sub>2</sub>

154835

Int. Cl. E 21 c 3/00.

## MINING MACHINE.

Applicant : MINING SUPPLIES LIMITED, OF HILL CREST WORKS, CARR HILL, BALBY, DONCASTER, ENGLAND.

Inventor : BRIAN RAYMOND STOPPANI.

Application No. 1179/Cal/80 filed October 15, 1980.

Convention date 19th October 1979 (7936341) U.K.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 17 Claims

A mining machine of the shearer type comprising an elongate machine body housing inter alia a power unit for powering at least one rotary, mineral cutting head, and at least one haulage unit mounted on the outside of the machine body and comprising firstly a brake unit and secondly a variable speed electric motor connected via speed reduction gearing to a machine haulage sprocket adapted to engage progressively rack bars or a chain extending along the mineral face.

Compl. specn. 10 pages.

Drg. 4 sheet.

CLASS : 107 C

154836

Int. Cl. : F 02 f 1/00.

## CYLINDER BLOCK FOR AN INTERNAL COMBUSTION ENGINE.

Applicant : CUMMINS ENGINE COMPANY, INC. OF 1000 FIFTH STREET, COLUMBUS, INDIANA 47201, UNITED STATES OF AMERICA.

Inventor : TERRENCE M. SHAW.

Application No. 1394/Cal/80 filed December 17, 1980.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 7 Claims

A cylinder block for an internal combustion engine comprising a cooling jacket portion having walls and a floor section; a plurality of cylinder tubes arranged in relatively spaced relation and extending at least in part upwardly into said cooling jacket from said floor section, the upper ends of said tubes being generally coplanar with the top edges of said cooling jacket walls and defining the top surface of the block; a plurality of internally threaded first and second bores disposed adjacent the perimeter of said cylinder tubes, said bores being adapted to threadably engage a corresponding number of cylinder head bolts; said first bores being in closer proximity to said jacket walls than said second bores, the internal threading of said second bores commencing at a level which is a greater distance from the top surface of said block than the level of commencement of the internal threading in said first bores.

Compl. specn. 10 pages.

Drg. Nil.

CLASS : 155 A

154837

Int. Cl. : C 09 k 3/00.

## A PROCESS FOR THE MANUFACTURE OF AN ANTI-ADHESIVE MATERIAL.

Applicants : 1. UKRAINSKOE NAUCHNO-PROIZVODSTVENNOE OBEDINENIE TSELLJULOZNO-BUMAZHNOI PROMYSHLENNOSTI (UKRNOBUMPROM), OF KIEV, ULITSA KUTUZOVA, 18/7, USSR; 2. LENINGRADSKY TEKHNOLOGICHESKY INSTITUT TSELLJULOZNO-BUMAZHNOI PROMYSHLENNOSTI, OF LENINGRAD, ULITSA, IVANA CHERNYKH, 4, USSR; 3. KRASNOGORODSKY EXPERIMENTALNY

TSELLJULOZNO-BUMAZHNY ZAVOD, OF LENINGRAD, PROSPEKT, SHVERNIKA, 49, USSR, ALL NATIONAL ORGANISATIONS ORGANISED UNDER THE LAWS OF THE UNION OF SOVIET SOCIALIST REPUBLIC.

Inventors : 1. DINA LIVERIEVNA TSESHKOVSKAYA. (2) ALEXANDR FEDOROVICH TISCHENKO. (3) EDUARD LVOVICH AKIM. (4) ALIA PAVLOVNA KRAMARENKO. (5) VALENTINA IVANOVNA DYACHENKO. (6) TAIYANA STEPANOVNA TANANAL. (7) LJUDMILA ILINICHNA SMYKALOVA. (8) TAIYANA NIKOLAEVNA MATVEEVA. (9) NATALIYA YAKOVLEVNA RASSKAZOVA. (10) ALBERT SERGEEVICH KHLAMENKO. (11) ALEXANDR ALEXANDROVICH IVANOY. (12) NIKOLAI GERSHOVICH USHOMIRSKY. (13) EVGENIA ABRAMOVNA ANIZHEL. (14) BORIS ALEXEEVICH SOROKIN. (15) NIKOLAI ZINOVIEVICH KVASKO. (16) ILYA DAVYDOVICH KOIFMAN. (17) JURY PAVLOVICH DYATEL.

Application No. 576/Cal/81 filed May 29, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 4 Claims

A process for the manufacture of an antiadhesive material comprising a sized cellulose-based paper faced with a water-soluble polymer coating such as herein described and a layer of an organosilicon compound such as herein described, wherein the cellulose used for the paper is either prehydrolyzed cord-type cellulose or a mixture of hardwood and softwood sulphate cellulose and the paper is protected additionally with an antistatic coating applied over the reverse side of the paper.

Compl. specn. 20 pages.

Drg. nil.

CLASS : 32F<sub>2</sub>(b)

154838

Int. Cl. C 07 d 99/00.

NOVEL 7  $\alpha$ -METHOXYCEPHALOSPORINS AND PROCESS FOR PRODUCING THE SAME.

Applicants : TOYAMA CHEMICAL CO., LTD., OF 2-5, 3-CHOME, NISHISHINJUKU, SHINJUKU-KU, TOKYO 160, JAPAN.

Inventors : (1) ISAMU SAIKAWA, (2) SHUNTARO TAKANO, (3) HIROYUKI IMAIZUMI, (4) ISAMU TAKAKURA, (5) HIROKAZU OCHIAI, (6) TAKASHI YASUDA, (7) HIDEO TAKI, (8) MASARU TAI AND (9) YUTAKA KODAMA.

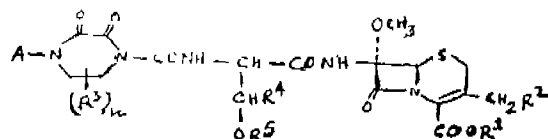
Application No. 650/Cal/82 filed June 7, 1982.

Division of Application No. 1014/Cal/79 dated September 26, 1979.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

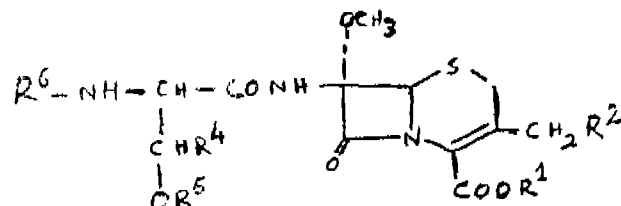
#### 15 Claims

A method for producing a 7  $\alpha$ -methoxycephalosporin represented by the general formula (I)

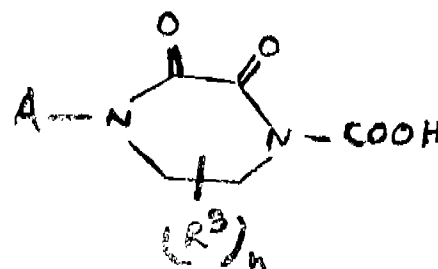


or the pharmaceutically acceptable salt thereof wherein R<sup>1</sup> represents a hydrogen atom or a carboxylprotecting group as herein described; R<sup>2</sup> represents an organic group linked through an oxygen or sulfur atom as herein described; R<sup>3</sup> represents a lower alkyl group as herein described; n is 0, 1 or 2; A represents a substituted or unsubstituted alkyl group; R<sup>4</sup> represents a lower alkyl group; and R<sup>5</sup> represents a hydrogen atom or a hydroxy-protecting group, which

comprises reacting at a temperature ranging from 60°C to 80°C a compound of the general formula (II),



wherein R<sup>0</sup> represents a hydrogen atom, an organic silyl group or organic phosphorus-containing group as herein described and R<sup>1</sup>, R<sup>2</sup>, R<sup>4</sup> and R<sup>5</sup> have the same meanings as defined above, with a reactive derivative in the carboxyl group of a compound represented by the general formula (III),



wherein A, R<sup>3</sup> and n have the same meanings as defined above, the pharmaceutically acceptable salt being obtained in a conventional matter.

Comp. specn. 44 pages.

Drgs. 2 sheets.

CLASS : 128 G & K

154839

Int. Cl. A 61 b 17/00.

A SCISSORS-TYPE MEDICAL APPARATUS FOR APPLYING A PLURALITY OF LIGATING CLIPS.

Applicants : ETHICON INC., OF SOMERVILLE, NEW JERSEY, UNITED STATES OF AMERICA.

Inventors : JOHN DIGIOVANNI AND DONALD MAX GOLDEN.

Application No. 1039/Cal/81 filed September 18, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 14 Claims

A scissors-type medical apparatus for applying a plurality of ligating clips comprising :

first and second jaws disposed in confronting relationship and adapted to be pivoted together by the scissors action of the instrument to hold and set a ligating clip;

first and second scissors handles operatively connected to said jaws to open and close said jaws;

a mechanism disposed between the jaws and the handles, operating in the plane of the handles and driven by the normal opening and closing action of the scissors handles and including :

means for providing a reciprocating long stroke motion for delivering clips to the jaws; and, means synchronized with said long stroke motion means for providing a reciprocating short stroke motion for feeding clips in succession.

Comp. specn. 34 pages.

Drg. 6 sheets.

CLASS : 27-I

154840

Int. Cl. : A 01 f 25/16; E 04 h 7/22.

## DEVICE FOR DISCHARGING A ROUND LOOSE MATERIAL SILO.

Applicant & Inventor : LOTHAR FESKE, OF HEGEL-STR 15, 5000 KOLN 90, FEDERAL REPUBLIC OF GERMANY.

Application No. 460/Cal/82 filed April 26, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 12 Claims

Device for discharging a vertically arranged round silo for loose material having the following characteristics :

1. the round silo having a horizontally arranged bottom firmly attached to a frame, with a centrally arranged discharge opening,
2. over the bottom a paddle wheel arranged to rotate about a vertical axis, brushing over the bottom and transporting loose material towards the central discharge opening,
3. over the paddle wheel there is an insert, coaxially arranged to the former, of conical shape, its diameter being larger than that of the discharge opening and its top directed upwards,
4. the paddle wheel is fastened to a tube-shaped chute, coaxially arranged to the discharge opening which is rotatably located below the silo bottom and can be rotated by a motor drive firmly attached to a frame below the silo bottom, the upper mouth of the chute being practically flush with the upper side of silo bottom and with some play towards the inner surface of the discharge opening and the chute being provided with paddle wheel fixtures extending beyond the silo bottom, characterised in that
5. a second tube-shaped chute (8) is provided with a greater inner width than that of the discharge opening and coaxially arranged to the chute (5) carrying the paddle wheel (3), the first chute (5) immersing into the second chute, which is firmly connected with the first chute (5) by means of heavy struts (9) arranged over the whole periphery, the passage cross-section of the annular space (15) between the chutes (5, 8) being larger than the passage cross-section of the annular space between the first chute (5) and the margin parts of the discharge opening,
6. the second chute (8) is rotatably located at the silo bottom (2),
7. the motor drive is provided outside the second chute (8) and so arranged that it acts on the second chute (8).

Comp. specn. 11 pages.

Drg. 2 sheets.

CLASS 32F<sub>2</sub>(b)

154841

Int. Cl. : C 07 d 99/00.

PROCESS FOR PREPARING 7  $\alpha$  METHOXYCEPHALOSPORINS AND PROCESS FOR PRODUCING THE SAME.

Applicants : TOYAMA CHEMICAL CO., LTD., OF 2-5, 3-CHOME, NISHISHINJUKU, SHINJUKU-KU, TOKYO 160, JAPAN.

Inventors : (1) ISAMU SAIKAWA, (2) SHUNTARO TAKANO, (3) HIROYUKI IMAIZUMI, (4) ISAMU TAKAKURA, (5) HIROKAZU OCHIAI, (6) TAKASHI YASUDA, (7) HIDEO TAKI, (8) MASARU TAI, AND (9) YUTAKA KODAMA.

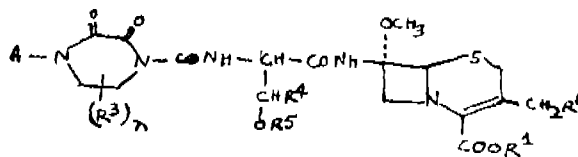
Application No. 652/Cal/82 filed June 7, 1982.

Division of Application No. 1014/Cal/79 dated September 26, 1979.

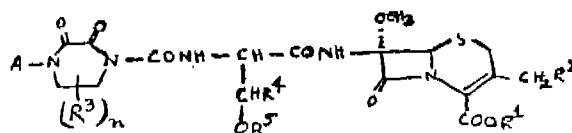
Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 15 Claims

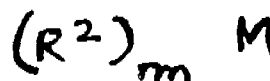
A method for producing a 7  $\alpha$ -methoxycephalosporin represented by the general formula (I)



or a pharmaceutically acceptable salt thereof wherein  $R^1$  represents a hydrogen atom or a carboxyl-protecting group as herein described  $R^2$  represents an organic group linked through an oxygen or sulfur atom as herein described;  $R^3$  represents a lower alkyl group as herein described;  $n$  is 0, 1 or 2;  $A$  represents a substituted or unsubstituted alkyl group as herein described;  $R^4$  represents a lower alkyl group; and  $R^5$  represents a hydrogen atom or a hydroxy-protecting group, which comprises reacting a 7  $\alpha$ -methoxycephalosporin of the general formula (II),



wherein  $R^0$  represents a group easily replaceable by a nucleophilic reagent as herein described and  $R^1$ ,  $R^2$ ,  $R^3$ ,  $R^4$ ,  $R^5$ ,  $A$  and  $n$  have the same meanings as defined above, with a compound represents by the general formula III



wherein  $M$  represents a hydrogen atom an alkali metal or an alkaline earth metal;  $M$  is 1 or 2; and  $R^2$  has the same meaning as defined above, the pharmaceutical salt being prepared in a conventional manner.

Compl. specn. 51 pages.

Drg. 2 sheets.

CLASS : 51D

154842

Int. Cl. : B 26 b 21/00.

## A SHAVING BLADE CARTRIDGE.

Applicants : HARBANSLAL MAIHOTRA & SONS LTD., 12 NEW C.I.T. ROAD, CALCUTTA-700073, STATE OF WEST BENGAL, INDIA.

Inventor : NAVIN PRAKASH MAIHOTRA.

Application No. 1379/Cal/82 filed November 26, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 13 Claims

A shaving blade cartridge comprising a cap, several blades a blade spacer element adapted to be located within a spacer locating piece and a main platform, a first blade being arranged below the cap such that the respective cutting edge is on the outer edge, a second blade being arranged in a similar manner with the spacer element being provided between the pair of blades, the platform being arranged adjoining to the second blade, and a plurality of pins being provided extending from the cap which passes through slots and holes provided with the respective blades, the spacer element and the platform, their ends being fastened in the platform.

Comp. specn. 13 pages.

Drg. 1 sheet.

CLASS : 51D

154843

Int. Cl. : B 26 b 21|00.

## A SAFETY RAZOR.

Applicants : HARBANSLAL MALHOTRA & SONS LIMITED, 12 NEW C.I.T. ROAD, CALCUTTA-700073, STATE OF WEST BENGAL, INDIA.

Inventor : NAVIN PRAKASH MALHOTRA.

Application No. 1380|Cal|82 filed November 26, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 4 Claims

A safety razor comprising a handle and integrally provided with the said handle is a head at an obtuse angle, a base plate and an actuating member provided with the said head, mounted on the said base plate, pivotally are two spring loaded gripping members having gripping notches, in-between the said gripping members and centrally on the said base plate is provided a sliding piece, the upper end of which said sliding piece is formed of a nose section with the periphery of the said sliding piece being provided with inwardly extending curves such that the gripping members are adapted to rest on the same, a channel formed centrally on the said sliding piece within which is mounted a spring loaded lever, one end of the said spring being fixed at the lower end of the said lever while the other of the spring is adapted to rest internally of the actuating member, the mechanism being such that when the said actuating member is pushed upwardly against the force of its spring the sliding piece also moves upwardly displacing the said gripping members outwardly and angularly of the head against the force of its spring and simultaneously also slightly pushing upwards the said lever mounted on the sliding piece because of the nose portion but when the pressure on the actuating member is released the same returns to its original position because of the force of the spring acting on the same while the sliding piece, the lever and the gripping members returns to its original position when a blade cartridge is being loaded on the safety razor wherein pressure is applied by the blade cartridge in the opposite direction making the said part return to its original position at which moment the gripping members engages the blade cartridge because of the springs provided with the gripping members mounting the blade cartridge on the safety razor.

Compl. specn. 13 pages.

Drg. 2 sheets

CLASS : 11C

154844

Int. Cl. A01k 61|00

## FISH GROWTH ACCELERATION APPARATUS.

Applicant : ALBERT HENRY KNOWLES, OF WEST-BROOK, MONTACK BRIDGE BY KIRKILL, INVERNESS-SHIRE, SCOTLAND, A BRITISH SUBJECT; AND ROBERT HARVEY RINES, OF 13 SPAULDING STREET, CONCORD, NEW HAMPSHIRE, UNITED STATES OF AMERICA, A UNITED STATES CITIZEN.

Inventors : ALBERT HENRY KNOWLES, ROBERT HARVEY RINES.

Application for Patent No. 462|Del|80 filed on 19th June 1980.

Convention application date 17th July, 1979|79-24914. (GREAT BRITAIN).

Appropriate office for opposition proceedings (Rule 4, Patents Rule, 1972) Patent Office Branch, New Delhi-110005.

## 18 Claims

Fish growth acceleration apparatus having, in combination with a water-circulated pond, means for blocking external light from entering a substantial area of the surface of the water of the pond to provide an area shielded from light under which the fish can rest in darkness; and means for enabling illuminated visual feeding by the fish at a region beyond said shielded area.

Compl. specn. 12 pages.

Drg. 1 sheet.

CLASS 97H

154845

Int. Cl. : F27d 11|04, H05b 3|62.

## ELECTRICAL RESISTANCE FURNACE FOR THE PREPARATION OF SILICON CARBIDE FROM A LOAD OF SILICIOUS AND CARBONACEOUS MATERIAL.

Applicant : DRESSER INDUSTRIES, INC., A CORPORATION ORGANISED UNDER THE LAWS OF THE STATE OF DELAWARE, ONE OF THE UNITED STATES OF AMERICA, OF THE DRESSER BUILDING, P.O. BOX 718, DALLAS, TEXAS 75221, UNITED STATES OF AMERICA, MANUFACTURERS.

Inventor : JAMES DAVIS PHILLIPS.

Application for Patent No. 602|Del|80 filed on 19th August, 1980.

Appropriate office for opposition proceedings (Rule 4, Patents Rule, 1972) Patent Office Branch, New Delhi-110005.

## 4 Claims

An electrical resistance furnace for the preparation of silicon carbide from a load of silicious and carbonaceous material which comprises a horizontal carbon core of broken-ring configuration contained in said load of silicious and carbonaceous material; said load being provided substantially uniformly around said core and in the same said broken-ring configuration as said core; electrodes connected to the ends of said core; said electrodes being in turn connected to a source of electrical power.

Compl. specn. 9 pages.

Drg. 1 sheet.

CLASS : 498A1, 4

154846.

Int. Class : B29h 9|08.

## "METHOD OF MANUFACTURING INSULATED ELECTRIC WIRE AND THE WIRE MANUFACTURED BY THE ABOVE METHOD".

Applicant : DR. BFCK & CO. AG., of 2000 Hamburg 28, Grossmannstrasse 105, Federal Republic of Germany, a company organised and existing under the laws of the Federal Republic of Germany.

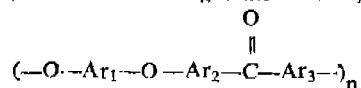
Inventors : HARALD JANSSEN & EBERHARD KERTSCHER.

Application for patent no. 640|Del|80 filed on 3rd September, 1980.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

## (12 claims)

A method of manufacturing insulated electric wire of the enamelled wire type intended to be used in the manufacture of windings for electrical equipment such as motors, transformers, magnetic coils relays and the like required to operate under load conditions at elevated temperature, comprising the steps of introducing into an extruder a solvent free thermoplastic polycondensate containing at least one partially crystalline thermoplastic polycondensate comprising crystallites having a melting point of at least 170°C and extruding at or above the crystalline melting point of said thermoplastic polycondensate, the molten material onto and around a metal wire so as to form on said wire a thin sheath having a thickness complying with the requirements of German Standard DIN 46, 435, the improvement which comprises said thermoplastic polycondensate being an aromatic polyetherketone having units of the general formula



wherein  $\text{Ar}_1$ ,  $\text{Ar}_2$  and  $\text{Ar}_3$  are equal or different and are residues derived from benzene, naphthalene and bi-phenyl, and wherein n is an integer from 50 to 200.

(Complete specification 11 pages).



CLASS : 205C.

154847.

Int. Class : B60b 3/00.

**"MANUALLY ADJUSTABLE WHEEL FOR VEHICLES".**

Applicant : GKN SANKEY LIMITED, a British Company of P.O. Box 20, Handley Castle Works, Telford, Shropshire, TF1 4RE, England.

Inventors : MICHAEL FREDERICK EDWARDS, EDWARD WILLIAMS, JOHN SAYER, CHARLES HERBERT LUTER, NILS LAU LETHIN, JOHAN MEILLER and BJARNE RENE HOLM.

Application for patent no. 649/Del/80 filed on 8th September, 1980.

Convention date 24th July, 1980/8024196 (G.B.).

Appropriate Office for opposition proceedings (RULE 4, Patents Rule, 1972) Patent Office Branch, NEW DELHI-110005.

## (11 claims)

A manually adjustable wheel for a vehicle, e.g. a tractor, comprising:

a rim to receive a tyre;

a plurality of fixing lugs spaced apart around the radially inner periphery of the rim;

a disc having means for connection to a hub of the vehicle.

and bolt means detachably securing the disc to the lugs; the disc and the lugs being arranged so that the disc may be selectively secured to the lugs in either of two positions spaced axially of the rotary axis of the wheel characterised in that:

the disc is of uniform thickness and has substantially the shape of a square with the corners cut off so that the disc has an irregular octagonal shape having four longer sides and four shorter sides arranged alternately around the periphery of the octagon, each shorter side being juxtaposed against one or more lugs;

and in that the bolt means are located along the shorter sides of the disc only and comprise two bolts passing through the disc at each of the shorter sides thereof and through the lugs juxtaposed to said shorter side.

(Complete Specification 12 pages Drawing 7 sheets).

CLASS : 85B, J.

154848

Int. Class : F27d 1/00.

**"FURNACE PARTICULARLY FOR THE MELTING OF ORE CONCENTRATE".**

Applicant : KLOCKNER-HUMBOLDT-DEUTZ AKTIEN-GESELLSCHAFT of Deutz-Mulheimer-Strasse 111, 5000 Köln 80, Federal Republic of Germany, a German company.

Inventor : FRIEDRICH MEGERLE.

Application for patent No. 681/Del/80 filed on 19th September 1980.

Appropriate Office for opposition proceedings (RULE. 1972) Patent Branch, NEW DELHI-110005.

## (10 Claims)

A furnace particularly for the melting of ore concentrate, characterised in that the furnace walls, particularly the furnace partitions consist of individual metallic cooling elements through which cooling medium flows and which are arranged above each other in beam form.

(Complete Specification 13 pages Drawing 5 sheets).  
5-367 GI84

CLASS : 93.

154849

Int. Class : B01j 2/04.

**"A SPOUTED BED GRANULATION PROCESS".**

Applicant : TDYO ENGINEERING CORPORATION, of 2-5 Kasumigaseki 3-chome, Chiyoda-gu, Tokyo, Japan, a Japanese Chemical corporation.

and

MITSUI TOATSU CHEMICALS, INC., of 2-5 Kasumigaseki 3-chome, Chiyoda-ku, Tokyo, Japan, a Japanese Chemical corporation.

Inventors : SUSUMU NIOH, HIROSHI HIRAYAMA, TETSUZO HONDA KOJI ISHIDA & MASAKI NARUO.

Application for patent No. 679/Del/80 filed on 16 September, 1980.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1978) Patent Office Branch, New Delhi-5.

## (17 claims)

A spouted bed granulation process comprising the steps  
(a) spraying droplets of a liquid, adhesive substance which is solidifiable when dried and/or cooled into a stream of gas :

(b) flowing said stream of gas containing said droplets in contact with solid seed particles in a granulator thereby causing said droplets to adhere to and thus enlarge said seed particles :

(c) discharging a coarsened product consisting of said enlarged seed particles from the granulator ;

(d) classifying the enlarged seed particles into at least two fractions selected from a final product fraction, a smaller powdery or granular product fraction (A) having an average particle size smaller than the average particle size of said final product and a larger granular product fraction (L) having an average particle size larger than the average particle size of said final product ;

(e) said smaller powdery or granular product (A) being continuously fed from the classifier and mixed with solid small particles (B) which are composed of at least one chemical component to be incorporated into the coarsened product, having an average particle size smaller than the average particle size of (A) ;

(f) feeding the mixture of (A) and (B) into said granulator to provide said seed particles in said granulator ;

(g) adjusting the relative amount of (A) and (B) in the mixture of (A) and (B) so as to control variations in the average particle size of said coarsened product discharged from the granulator within desired limits; characterised in that, said smaller granular product (A) is continuously mixed with said small particles (B) at a rate independent of the rate at which it is produced and that the amount of solid small particles (B) mixed with product (A) is also independently variable, the control of the relative amounts of (A) and (B) being recycled to the granulator being determined in response to the measured variations in the average particle size of said coarsened product discharged from the granulator, whereby said variations are kept within the desired limits.

Compl. specn. 59 pages.

Drg. 9 sheets.

CLASS : 70 C<sub>6</sub>, 70 A

154850

Int. Cl : H01m, 13/00.

**METHOD OF ASSEMBLING ELECTRO-PRECIPI TATOR DISCHARGE ELECTRODE AND DISCHARGE ELECTRODE FOR THE SAME.**

Applicant : LODGE-COTTRELL LIMITED, A BRITISH COMPANY, OF GEORGE STREET PARADE, BIRMINGHAM B3 1QQ, ENGLAND.

Inventor : TERENCE BERNARD FOWLER COTTRELL AND DENNIS CHARLES PADDOCK.

Application for Patent No. 693/Del/1980 filed on 24th September, 1980.

Convention date 11th October, 1979/7935404/(U.K.).

Appropriate office for opposition proceedings (Rule 4, Patents Rule, 1972) Patent Office Branch, New Delhi-110 005.

#### 10 Claims

An electro-precipitator discharge electrode comprising :

- (a) an elongated mast,
- (b) a plurality of cross members fixed to the mast, extending transversely of the mast, and having apertures extending transversely in the cross members, and
- (c) a discharge element extending between the cross members through the apertures longitudinally of the mast and being fixed in the apertures by direct biting of the material of the cross members onto the element round the apertures.

Complete specn. 9 pages.

Drg. 1 sheet

CLASS : 55E.

154851

Int. Cl. : A61k 7/00.

METHOD FOR THE PREPARATION OF A NITRITE-CONTAINING STABLE AGENT FOR THE TREATMENT OF THE SKIN.

Applicant : SOLCO BASEL AG OF GELLERTSTRASSL 18, CH-4052 BASEL, SWITZERLAND, A SWISS COMPANY.

Inventors : SHALVA MARDI, HEINZ FELIX LICHTI, GUIDO BAUMGARTNER, DANIEL GARTEIZ, CLAUDE IVAN JUDD AND MURRAY WEINER.

Application for Patent No. 698/Del/80 filed on 26th September, 1980.

Appropriate office for opposition proceedings (Rule 4, Patents Rule, 1972) Patent Office Branch, New Delhi-110 005.

#### 4 Claims

A method for the preparation of a nitrite ( $\text{NO}_2$ ) containing product stable at room temperature or at temperatures below room temperature, said product being adapted to be employed in the cosmetic or medicine fields, which comprises reacting a metal nitrite of the kind such as herein described, said metal nitrite being soluble in aqueous nitric acid, with a nitric acid solution having a concentration of from 6 to 10 millimole/ml or with more concentrated nitric acid solution and when using said more concentrated nitric acid solution diluting with water until the resulting solution has a content of from 6 to 10 millimole/ml of nitric acid and a pH value of less than 1, said metal nitrite being added to the nitric acid solution in an amount corresponding to 0.01 to 5 mg of nitrite ( $\text{NO}_2$ ) per ml of the final solution.

Compl. specn. 22 pages.

CLASS : 35 B

154852

Int. Cl. : C04b 7/02.

A PROCESS FOR MANUFACTURE OF PORTLAND CEMENT FROM WASTE SLUDGE.

Applicant : SHRI RAM INSTITUTE FOR INDUSTRIAL RESEARCH (A UNIT OF SHRI RAM SCIENTIFIC & INDUSTRIAL RESEARCH FOUNDATION) AN INDIAN INSTITUTE, 19, UNIVERSITY ROAD, DELHI-11007, INDIA.

Inventors : HUKAM CHAND JAIN, PREM KUMAR MAIP, VIRENDER KUMAR TANDON & RAJESH KUMAR GANDHI.

Application for Patent No. 702/Del/80 filed on 29th September, 1980.

Appropriate office for opposition proceedings (Rule 4, Patents Rule, 1972) Patent Office Branch, New Delhi-110 005.

#### 9 Claims

A process for the manufacture of hydraulic Portland cement which comprises in treating by known means such as by a mechanical press, a sludge consisting essentially of calcium hydroxide for complete or partial removal of water therefrom, preparing a mixture by addition of clay with or without known additives to said treated sludge, and thereafter subjecting the mixture to the known steps of manufacture of hydraulic Portland cement.

Compl. specn. 15 pages.

CLASS : 32 E & 40 B

154853

Int. Cl. : C08f, 1/00.

PROCESS FOR PREPARING AN ANIONIC POLYMERIZATION CATALYST COMPOSITION.

Applicant : THE GENERAL TIRE & RUBBER COMPANY, A CORPORATION ORGANIZED UNDER THE LAWS OF THE STATE OF OHIO, UNITED STATES OF AMERICA, OF ONE GENERAL STREET, AKRON, OHIO 44329, UNITED STATES OF AMERICA.

Inventors : IVAN GLEN HARGIS, RUSSELL ANTHON LIVIGNI, SUNDAR LAL AGGARWAL & ROBERT EDWARD BINGHAM, RICHARD RODNEY DURST & HUBERT JAKOB FABRIS.

Application for Patent No. 719/Del/80 filed on 3rd October, 1980.

Complete specification left on 31st December, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

#### 8 Claims

A process for preparing an anionic polymerization catalyst composition comprising mixing (1) an alcoholate selected from the group consisting of barium alcoholate, calcium alcoholate and strontium alcoholate and mixtures thereof, (2) an organoaluminum compound and (3) an organomagnesium compound, where the mole ratio computed as metal of barium, calcium and/or strontium to magnesium is from 1 : 10 to 1 : 2 and where the mole ratio computed as metal of magnesium to aluminum is from 105 : 1 to 1.5 : 1.

Provisional specn. 48 pages.

Drg. 5 sheets

Complete specn. 63 pages.

CLASS : 56 B

154854

Int. Cl. : C01g 9/00.

A PROCESS AND APPARATUS FOR THE PYROLYSIS OF A HYDROCARBON FEEDSTOCK.

Applicant : IMPERIAL CHEMICAL INDUSTRIES PLC, A FORMERLY KNOWN AS IMPERIAL CHEMICAL INDUSTRIES LIMITED, A BRITISH COMPANY, OF IMPERIAL CHEMICAL INDUSTRIES LIMITED, A BRITISH BANK, LONDON SW1P 3JF, ENGLAND.

Inventors : FREDERICK ROWE & DAVID JOHN BROWN.

Application for Patent No. 728/Del/80 filed on 6th October, 1980.

Convention date 18th October, 1979/7936152/(U.K.).

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi.

#### 14 Claims

A process for the pyrolysis of a hydrocarbon feedstock which comprises contacting the feedstock in a reactor with a stream of hot hydrogenating gas, the hydrogenating gas being obtained, at least in part, by partial combustion of carbonaceous byproducts from the pyrolysis process characterised by flowing the hydrocarbon feedstock within the reactor countercurrently to the stream of hot hydrogenating gas.

Compl. specn. 13 pages.

Drg. 5 sheets.

CLASS : 130 F, 108B

154855

Int. Class : C.22.b 9|12 and C.21.c. 1|00

**"PROCESS FOR THE CONDITIONING OF SLAG DURING METAL BATH REFINING."**

Applicant : ARBED S.A., of Avenue de la Liberte, Luxembourg, a Company organized under the laws of Luxembourg.

Inventor : FRANCOIS SCHELEIMER, ROMAIN HENRION, FERDINAND GOEDERT, LUCIEN LORANG AND JEAN BAUMERT.

Application for Patent No. 798|Del|1980 filed on 6th November, 1980.

Appropriate Office for opposition proceedings (Rule 4, Patent Rule 1972) Patent Office Branch, New Delhi-110005.

**7 Claims**

In a process for refining an iron melt in a crucible overlain by a slag layer tending upon oxidation of the slag to assume a forthly nonfluid consistency, the improvement which comprises, in combination, the steps of :—

- blowing oxygen onto the top of said melt from a lance head disposed thereabove;
- continuously measuring the flowability of said layer of slag and the level of said layer and the speed of decarburization of the bath; and
- bubbling an inert gas into said melt from the bottom of said crucible at a rate of flow controlled in response to the measurements obtained in step (b) to maintain the level of the slag at a predetermined distance from said head of said lance while preventing said slag from frothing and the decarburization at a maximum under the condition of maintaining the level of said slag at said predetermined distance from said head and said slag in a nonfrothy character.

(Complete Specification 10 pages)

CLASS : 130 G.

154856

Int. Class : C21c 1|00, C22b 9|00.

**"METHOD OF REFINING METALS IN A CONVERTER."**

Applicant : CREUSOT-LOIRE, of 42 rue d' Anjou, 75008 Paris, France, a French Company.

Inventor : PIERRE LEROY.

Application for patent No. 800|Del|80 filed on 11th November, 1980.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

**12 Claims**

Method of refining metals, and more especially refining pig iron into steel, in a converter, by blowing oxidizing gases, particularly pure oxygen, by means of the one hand of a lance blowing from top to bottom, and on the other hand of protected tuyeres blowing vertically or obliquely, from bottom to top, this method comprising an improvement which is characterised in that the amount of oxygen blown from bottom to top through the tuyeres is between 3% and 25% of the total amount of oxygen necessary to refine the metal bath, in that this oxygen is blown from bottom to top with a non-increasing flow, in that a stirring gas, neutral or oxidizing, can at certain moment be added to this oxygen blown from bottom to top, and in that the jets of oxygen blown from bottom to top, whether or not mixed with a stirring gas, have a diameter at most equalling 18 millimeters, this diameter being the jet diameter at the outlet of said protected tuyeres.

(Complete specification 19 pages).

CLASS : 40L

154857

Int. Class : G01n 21|00; G01j 3|00, 5|00.

**"NON DISPERSIVE INFRA RED RADIATION GAS ANALYSER."**

Applicant : HARTMANN & BRAUN AKTIENGESELLSCHAFT, of Grafstrasse 97, 6000 Frankfurt/Main, Federal Republic of Germany, a German body corporate.

Inventors : WALTER FABINSKI and MARGARETA ASCHERFELD.

Application for patent No. 810|Del|80 filed on 15th November, 1980.

Convention date 14th March, 1980|8008833 (U.K.).

Appropriate Office for opposition proceedings (Rule 4, Patents Rule, 1972) Patent Office Branch, New Delhi-110005.

**7 Claims**

A non dispersive infra red radiation gas analyser having a radiation source, two beam paths, a radiation modulating device, a radiation receiving device having two successive chambers in each beam path containing the gas component to be measured, beam weakening means between the nearer and the furthest chambers, a differential pressure measuring device comprising a membrane capacitor connected with the chambers such that its output signal is a measure of the gas component to be measured wherein the beam weakening means between the nearer and the furthest receiver chambers consist of solid filters covering the whole sectional areas of the beams.

(Complete Specification 7 pages)

Drawing one sheet)

CLASS : 154D+55 E4

154858

Int. Cl. C09 d—11|02.

**A PROCESS FOR THE REMOVAL OF PRINTED MATTER FROM THE OUTER SURFACES OF WATER-SOLUBLE GELATINOUS CONTAINERS.**

Applicants : MANEKLAL SCIENTIFIC RESEARCH FOUNDATION, of A1, BRIGHTON NO. 1, RUNGTA LANE, OFF NAPEAN SEA ROAD, BOMBAY 400 006, MAHARASHTRA STATE, INDIA.

Inventor : GIRI KISHOR LALL.

Application No. 343|Bom|1980 filed November 13, 1980.

Comp. after provisional left on February 15, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office, Bombay Branch.

**5 Claims**

A process for the removal of printed matter from the outer surfaces of water-soluble containers of the kind such as herein described which comprises immersing imprinted containers in a solution of an aliphatic alcohol of the kind such as herein described a halogenated hydrocarbon of the kind such as herein described and deionised water for a predetermined period of time, if necessary with agitation of the containers within the solution removing in any convenient manner the containers from said solution and wiping the now loosened printed matter from the surfaces of the containers to provide print-free containers.

Comp. Specn. 7 pages Drgs. Nil.

Prov. Specn. 5 pages Drgs. Nil

Ind. CLASS : 170D+62A.

154859

Int. Class : C11d—7|00

**AN IMPROVED THICKENED LIQUID CHLORINE BLEACHING COMPOSITION.**

Applicant : HINDUSTAN LEVER LIMITED OF HINDUSTAN LEVER HOUSE, 165-166 BACKBAY RECLAMATION, BOMBAY-1, MAHARASHTRA, INDIA.

Inventor : ULRICH SCHILP.

Application No. 373/Bom/1980 dated December 1, 1980.

Appropriate office for opposition proceedings (Rule 4, Patent Rules, 1972), Patent Office Branch, Bombay.

#### 6 Claims

1. An improved thickened liquid chlorine bleaching composition comprising an aqueous alkali-metal hypochlorite solution and thickened by means of an additive characterized in that said composition has as said additive two different detergent active compounds namely an amine oxide and a saturated fatty acid soap as hereindescribed of which atleast one is water soluble, in an amount of 0.5 to 5% based on the final composition, said composition also including a buffer salt as hereindescribed in an amount of at least 50 m mol per kilogram of the composition and wherein the content of active chlorine of said composition being 1 to 10% by weight, said composition having a kinematic viscosity of 10 to 150CS and is also substantially free from insoluble, solid abrasive or clay particles, said composition, optionally including 0.1 to 15% by weight of an electrolyte as hereindescribed.

Complete Specification 14 pages.

Drawing Nil.

CLASS : 32F3c + 32F3a

154860

Int. Cl. : C07c—27/00, 29/00, 31/00, 33/00, 35/00.

IMPROVEMENTS IN OR RELATING TO A PROCESS FOR THE PREPARATION OF TERPENIC ALCOHOLS FROM THE TERPENIC OLEFINS.

Applicant : M/s. CAMPHOR & ALLIED PRODUCTS LIMITED, 133, Mahatma Gandhi Road, Bombay-400023, Maharashtra, India.

Inventors : (1) DR. SATISH CHANDRA NIGAM, (2) DR. SUDHIR NARAYANRAO BONNORE, (3) DR. HOSA AGRAHARA NAGAPPA SUBBARAO & (4) DR. SUKH DEV.

Application No. 160/Bom/1981 filed June 9, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office, Bombay Branch

#### 8 Claims

A process for the preparation of terpenic alcohols with or without by-product namely, an ether or an ester thereof, from terpenic olefins which comprises (i) refluxing the said terpenic olefin in the presence of water and a water soluble organic solvent such as an ether, lower alcohol or a lower organic acid as herein described in a pot, (ii) allowing the condensed distillate as obtained from step (i) to pass through a bed of cation exchange resin catalyst such as herein described wherein the reaction takes place and (iii) allowing the product formed and the unchanged reactants from the bed of catalyst to fall back into the pot, thus effectively removing the product from the reaction site and enabling continuous recycle until all the olefin is converted to the alcohol.

Complete Specification 15 pages.

Drawing 3 sheets.

CLASS : 32 F 3 a.

154861

Int. Class : C07 c—41/00

IMPROVEMENTS IN OR RELATING TO A PROCESS FOR THE PREPARATION OF TERPENIC ETHERS FROM TERPENIC OLEFINS.

Applicants : CAMPHOR & ALLIED PRODUCTS LTD., 133 MAHATMA GANDHI ROAD; BOMBAY-400 023, MAHARASHTRA, INDIA.

Inventors : 1. DR. SATISH CHANDRA NIGAM, 2. DR. SUDHIR NARAYANRAO BONNORE, 3. DR. HOSA-AGRAHARA NAGAPPA SUBBARAO, and 4. DR. SUKH DEV.

Application No. 162/Bom/1981 filed Jun. 3, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Bombay Branch.

#### 6 Claims

A process for the preparation of terpenic ethers from terpenic olefins which comprises, (i) refluxing the said terpenic olefin with a lower alcohol such as herein described in a pot, (ii) allowing the condensed distillate as obtained from step (i) to pass through a bed of cation exchange resin catalyst such as herein described wherein the reaction takes place and (iii) allowing the product formed and the unchanged reactants from the bed of catalyst to fall back into the pot, thus effectively removing the product from the reaction site and enabling continuous recycle until all the terpenic olefin is converted to the terpenic ether.

Complete specification 9 pages,

Drawing 3 sheets.

CLASS : 32F3a

154862

Int. Cl. C07C-67/00. 69/00.

IMPROVEMENTS IN OR RELATING TO A PROCESS FOR THE PREPARATION OF TERPENIC ESTERS FROM TERPENIC OLEFINS.

Applicant : CAMPHOR & ALLIED PRODUCTS LTD. 133, MAHATMA GANDHI ROAD, BOMBAY-400 023, MAHARASHTRA, INDIA.

Inventors : 1. DR. SATISH CHANDRA NIGAM, 2. DR. SUDHIR NARAYANRAO BONNORE, 3. DR. HOSA-AGRAHARA NAGAPPA SUBBARAO, and 4. DR. SUKH DEV.

Application No. 163/Bom/1981 filed Jun. 9, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Bombay Branch.

#### 6 Claims

A process for the preparation of terpenic esters from terpenic olefins which comprises, (i) re-fluxing the said terpenic olefin with a lower organic acid such as formic, acetic or propionic acid in a pot, (ii) allowing the condensed distillate as obtained from step (i) to pass through a bed of cation exchange resin catalyst such as herein described wherein the reaction takes place and (ii) allowing the product formed and unchanged reactants from the catalyst bed to fall back into the pot, thus effectively removing the product from the reaction site and enabling continuous recycle until all the terpenic olefin is converted to the terpenic ester.

Comp. Specn. 10 pages.

Drg. 3 sheets.

CLASS : 1A & 32E

154863

Int. Cl. C 08 h 5/04.

A METHOD FOR PREPARING A COMPOSITE RESINOUS ADHESIVE.

Applicant : KONTIKI CHEMICALS AND PHARMACEUTICALS PRIVATE LIMITED, A. K. OFFICE BUILDING, MILL ROAD, BALIAPATAM, CANNANORE-670 010, KERALA.

Inventor : DR. CHATHANATH CHATHANYA MENON.

Application No. 27/Mas/81 filed November 26, 1981.

Divisional of Application No. 150134 filed November 5, 1980.

Ante Dated to January 20, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

## 6 Claims. No drawing

A method for preparing a composite resinous adhesive comprising

- (a) acidifying coconut shell derivative as hereinbefore described till it attains a pH of 5.
- (b) stirring the acidified coconut shell derivative of step (a) and adding furfuryl alcohol thereto,
- (c) admixing a known aminoplastic synthetic resin under stirring to the product obtained at the end of step (b), and
- (d) adding a known hardener to the resultant admixture of step (c) to obtain a composite resinous adhesive.

Comp. 12 pages.

## PATENTS SEALED

145456 145457 145458 145483 145496 145519 146736 149365  
151407 152333 152643 152644 152645 152648 152649 152650  
152652 152653 152657 152659 152660 152661 152662 152664  
152674

## OPPOSITION PROCEEDINGS

## (1)

An opposition has been entered by Council of Scientific & Industrial Research to the grant of a patent on application No. 153085 made by J. M. Hanlet and E. R. J. Tarantino.

## (2)

The opposition entered by V. M. R. Engineering Works, to the grant of a patent on application No. 149015 made by Shri Srinivasagam Pillai Ramasamy as notified in Part-III, Section 2, of the Gazette of India, dated the 13th March, 1982 has been allowed and the grant of a patent on application is refused.

## (3)

The opposition entered by Shri Jai Singh alias Jaswant Singh, to the grant of a patent on application No. 149450 made by Comifret N.V., as notified in Part-III, Section 2 of the Gazette of India, dated the 31st July, 1982 has been partly allowed and a patent has been ordered to be sealed on the application subject to amendment of the specification.

## (4)

An opposition has been entered by Voest-Alpine Aktiengesellschaft to the grant of a patent on application No. 153078 made by Midrex Corporation.

## AMENDMENT PROCEEDINGS UNDER SECTION 57.

## (1)

The amendments proposed by Yokogawa Hokushin Electric Corporation, in respect of Patent Application No. 152723 as advertised in Part III, Section 2 of the Gazette of India dated the 19th May 1984 has been allowed.

## (2)

Notice is hereby given that Pharmindustrie, a Frehon Body Corporate, of 35 Quai du Moulin de Cage, 92231 Gennevilliers, France, have made an application under Section 57 of the Patents Act, 1970 for amendment of application, specification and drawings of their application for Patent No. 153355 for "A process for the preparation of Heparin Esters". The amendments are by way of changing the name

"Pharmindustrie" to "Pharmuka Laboratories". The application for amendment and the proposed amendments can be inspected free of charge at the Patent Office, 214 Acharya Jagadish Bose Road, Calcutta-700017 or copies of the same can be had on payment of the usual copying charges. Any person interested in opposing the application for amendment may file a notice of opposition on the prescribed form 30 within three months from the date of this notification, at the Patent Office, Calcutta. If the written statement of opposition not filed with the notice of opposition it shall be left within the month from the date of filing the said notice.

## (3)

Notice is hereby given that Hylsa, S.A., a corporation organized under the laws of the Republic of Mexico, of APDO Postal 996, Monterrey, N. L. Republic of Mexico, have made an application under section 57 of the Patents Act, 1970 for amendment of the specification and of their patent application No. 152563 for "A Method of Reducing Particulate Iron Ores to Metal Particles." The amendments are by way of correction to make the description and claims more clear. The application for amendment and proposed amendments can be inspected free of charge at the Patent Office, 214 Acharya Jagadish Bose Road, Calcutta-700017, or copies of the same can be had on payment of the usual copying charges. Any person interested in opposing the application for amendment may file a notice of opposition on the prescribed form 30 within three months from the date of this notification, at the Patent Office, Calcutta. If the written statement of opposition is not filed with the notice of opposition it shall be left within one month from the date of filing the said notice.

## RENEWAL FEES PAID

124100 124456 133145 133635 133742 133818 133841 133997  
134013 134041 134147 136782 136783 137753 137838 137860  
137894 138088 138577 139548 139654 139745 139906 141013  
141524 141655 142312 142374 142442 142474 142831 143218  
143391 143505 143912 144044 144123 144794 145173 145207  
146172 146197 146644 146952 147230 147887 147990 148294  
148604 149028 149087 149198 149514 149548 149930 150026  
150087 150545 150738 150813 150891 150935 150995 151022  
151062 151125 151530 151597 151731 151859 151955 151983  
151994 152170

## RESTORATION PROCEEDINGS

## (1)

Notice is hereby given that an application for restoration of Patent No. 144028 dated the 28th July, 1977 made by Union Carbide India Limited on the 28th April, 1984 and notified in the Gazette of India, Part III, Section 2 dated the 11th August, 1984 has been allowed and the said patent restored.

## (2)

Notice is hereby given that an application was made under Section 60 of the Patents Act, 1970 for the restoration of Patent No. 145333 granted to Council of Scientific and Industrial Research for an invention relating to "an arc stand for striking an arc between two electrodes for photographing the spectra of elements with spectrographs".

The patent ceased on the 9th July, 1983 due to non-payment of renewal fees within the prescribed time and the

cessation of the patent was notified in the Gazette of India, Part-III, Section 2, dated the 13th October, 1984.

Any interested person may give notice of opposition to the restoration by leaving a notice on Form 32 in duplicate with the Controller of Patents, The Patent Office, 214, Acharya Jagadish Bose Road, Calcutta-700017 on or before the 15th February 1985 under Rule 69 of the Patents Rules, 1972. A written statement in triplicate setting out the nature of the Opponent's interest, the facts upon which he bases his case and the relief he seeks, shall be filed with the notice or within one month from the date of the notice.

## (3)

Notice is hereby given that an application was made under Section 60 of the Patents Act, 1970 for the restoration of Patent No. 135918 granted to Eli Lilly and Company for an invention relating to "electronic system and method for capsule inspection".

The patent ceased on the 13th September, 1983 due to non-payment of renewal fees within the prescribed time and the cessation of the patent was notified in the Gazette of India, Part-III, Section 2, dated the 8th September, 1984.

Any interested person may give notice of opposition to the restoration by leaving a notice on Form 32 in duplicate with the Controller of Patents, The Patent Office, 214, Acharya Jagadish Bose Road, Calcutta-700017 on or before the 15th February 1985 under Rule 69 of the Patents Rules, 1972. A written statement in triplicate setting out the nature of the Opponent's interest, the facts upon which he bases his case and the relief he seeks, shall be filed with the notice or within one month from the date of the notice.

## (4)

Notice is hereby given that an application was made under Section 60 of the Patents Act, 1970 for the restoration of Patent No. 139345 granted to Wavin B. V. for an invention relating to "extruder for corrugated tube".

The patent ceased on the 4th December, 1983 due to non-payment of renewal fees within the prescribed time and the cessation of the patent was notified in the Gazette of India, Part-III, Section 2, dated the 8th September, 1984.

Any interested person may give notice of opposition to the restoration by leaving a notice on Form 32 in duplicate with the Controller of Patents, The Patent Office, 214, Acharya Jagadish Bose Road, Calcutta-700017 on or before the 15th February 1985 under Rule 69 of the Patents Rules, 1972. A written statement in triplicate setting out the nature of the Opponent's interest, the facts upon which he bases his case and the relief he seeks, shall be filed with the notice or within one month from the date of the notice.

## (5)

Notice is hereby given that an application was made under Section 60 of the Patents Act, 1970 for the restoration of Patent No. 147080 granted to Taraporevala Marine Biological Research Station for an invention relating to "a hatchery equipment for fish eggs".

The patent ceased on the 15th October, 1983 due to non-payment of renewal fees within the prescribed time and the cessation of the patent was notified in the Gazette of India, Part-III, Section 2, dated the 19th May, 1984.

Any interested person may give notice of opposition to the restoration by leaving a notice on Form 32 in duplicate with the Controller of Patents, The Patent Office, 214, Acharya Jagadish Bose Road, Calcutta-700017 on or before the 15th February 1985 under Rule 69 of the Patents Rules, 1972. A written statement in triplicate setting out the nature of the Opponent's interest, the facts upon which he bases his case and the relief he seeks, shall be filed with the notice or within one month from the date of the notice.

## (6)

Notice is hereby given that an application was made under Section 60 of the Patents Act, 1970 for the restoration of Patent No. 143153 granted to Vidyut Metallica Private Limited for an invention relating to "a safety razor".

The patent ceased on the 12th September, 1983 due to non-payment of renewal fees within the prescribed time and the cessation of the patent was notified in the Gazette of India, Part-III, Section 2, dated the 8th September, 1984.

Any interested person may give notice of opposition to the restoration by leaving a notice on Form 32 in duplicate with the Controller of Patents, The Patent Office, 214, Acharya Jagadish Bose Road, Calcutta-700017 on or before the 15th February 1985 under Rule 69 of the Patents Rules, 1972. A written statement in triplicate setting out the nature of the Opponent's interest, the facts upon which he bases his case and the relief he seeks, shall be filed with the notice or within one month from the date of the notice.

## REGISTRATION OF DESIGNS

The following designs have been registered. They are not open to inspection for a period of two years from the date of registration except as provided for in Section 50 of the Designs Act, 1911.

The date shown in the each entry is the date of registration of the design included in the entry.

Class 1. No. 154557. Peico Electronics and Electricals Limited, of Shivsagar Estate, Block 'A', Dr. Annie Besant Road, Worli, Bombay 18(WB), Maharashtra Estate, India, an Indian Company. "Television Set". 28th June, 1984.

Class 1. No. 154753. Bharat Industries, Sardar V. P. Road, Janta Garden Chowk, Rajkot-360002, Gujarat State, an Indian Partnership Firm. "Knife". 31st August, 1984.

Class 1. No. 154754. Bharat Industries, Sardar V. P. Road, Janta Garden Chowk, Rajkot-360002, Gujarat State, an Indian Partnership Firm. "Knife". 31st August, 1984.

Class 1. No. 154622. Bassein Metal Industries, B-4, The Vasai Taluka Industrial Co-operative Estate, Village Achole, Taluka Vasai, District Thane, State of Maharashtra, an Indian Partnership Firm. "Toy Water Filter". 23rd July, 1984.

Class 1. No. 154623. Bassein Metal Industries, B-4, The Vasai Taluka Industrial Co-operative Estate, Village Achole, Taluka Vasai, District Thane, State of Maharashtra, an Indian Partnership Firm. "Toy Cup-Saucer". 23rd July, 1984.

Class 1. No. 154711. The Parker Pen Company, a company organized and existing under the laws of the State of Delaware, United States of America, of one parker place, Janesville, Wisconsin 53545, United States of America. "A Writing Instrument". 18th August, 1984.

Class 1. No. 154651. Application Art Laboratories Co., Ltd., a limited liability company, organised and existing under the laws of Japan of 9-16, Hanahata 2 chome, Adachi-ku, Tokyo, Japan. "Two-part Lock Closure for Portable Containers". 1st August, 1984.

Class 1. No. 154652. Vinodrai Vandravandas Barchha, an Indian of Flat No. 9B, (9th floor) "NEEL KAMAL", 41, Elgin Road, Calcutta-700 020, West Bengal, India. "Handle For Container, Boxes, Packings and The Lime". 1st August, 1984.

Class 1. No. 154680. Aruna Padmakar Tole, an Indian National, Block No. A-1-N-102, Bhaskara Building, T.I.F.R. Housing Colony, City of Bombay 400 005, State of Maharashtra, India. "Safety Device For A Sewing Machine". 10th August, 1984.

Class 1. No. 154646. Pahwa Surgicals, 67/4-Madras House, Dariya Ganj, New Delhi-110002, India. An Indian Partnership Firm. "Eye Shield". 28th July, 1984.

Class 1. No. 154369. DLF UNIVERSAL LIMITED., of 21-22, Narindra Place, Parliament Street, New Delhi-110001, India, an Indian Company, "Potters Wheel". 30th April, 1984.

Class 1. No. 152314. SWAN APPLIANCES, a proprietorship firm of Delhi-110 006, Union Territory of India. "A softy Ice Cream Market". 20th September, 1982.

Class 1. No. 154687. Kishco Sutlery Limited (a company incorporated under the Companies Act) at Nirmal, 3rd floor, 241 Backbay Reclamation, Nariman point, Bombay 400 021, Maharashtra State, India. "Spoon". 13th August, 1984.

Class 1. No. 154331. Harbans Lal Malhotra & Sons LTD. of P-12 New C.I.T. Road, Calcutta-700073, West Bengal, India, a Company incorporated under the Companies Act 1956. "Industrial Blade". 19th April, 1984.

Class 3. No. 154759. Bharat Industries, Sardar V. P. Road, Janta Garden Chowk, Rajkot-360002, Gujarat State, an Indian Partnership Firm. "Handle of Knife". 31st August, 1984.

Class 3. No. 154691. The Atlantic Oil Company Private Limited, an Indian Private Limited Company, of Mews Flat, 11, Came Street, Calcutta-700 017, State of West Bengal, India, Manufacturers. "A Container". 14th August, 1984.

Class 3. No. 154832. Ruby Sales and Service Private Limited, an Indian Company, Manufacturers and merchants, of Ruby House, J. K. Sawant Marg, Dadar, Bombay-400 028, Maharashtra State, "Soles for footwear". 17th September, 1984.

Class 3. No. 152313. SWAN APPLIANCES, a Proprietorship firm of 4749 Pahari Dhiraj, Delhi-110 006, Union Territory, India. "A Softy Ice Cream Maker". 20th September, 1982.

Class 3. No. 154461. Anjali Products, 17 Bombay-400 064 State of Maharashtra, India. "Wall Cassette Shele". 30th May, 1984.

Class 3. No. 154634. Pravin Amritlal Sinroja, Indian National of 5 Dattani Shopping Centre, Vasanji Lalji Road, Kandivli (West), Bombay 400 067, State of Maharashtra, India. "T O Y". 26th July, 1984.

Class 3. No. 154822. Narendra Kumar Jain, Indian National, 82-B, Meher Apartments, Anstey Road, Bombay 400 026, Maharashtra State, India. "Toilet Seat". 13th September, 1984.

Class 3. No. 154823. Narendra Kumar Jain Indian National, 82-B, Meher Apartments, Anstey Road, Bombay 400 026, Maharashtra State, India. "Wash Basin". 13th September, 1984.

Class 3. No. 154825. Narendra Kumar Jain, Indian National, 82-B, Meher Apartments, Anstey Road, Bombay 400 026, Maharashtra State, India. "Ashtray". 13th September, 1984.

Class 3. No. 154826. Narendra Kumar Jain, Indian National, of 82-B, Meher Apartments, Anstey Road, Bombay-400 026, Maharashtra State, India. "Coaster". 13th September, 1984.

Class 12. No. 154397. Vijay Traders, 7008-A, Prem Gali, Near Ashok Gali, Gandhi Nagar, Delhi-110031, an Indian Proprietary concern. "Camphor Tablet". 14th May, 1984.

Extn. of copyright for the Second period of five years.

No. 149445.

Class-1.

Nos. 150641, 154342, 154343, 149078, 149073, 154409, 149399, 149082, 148699, 148569, 154062 Class-3.

Nos. 149035, 149072

Class-4.

Extn. of copyright for the Third period of five years.

Nos. 154342, 154343, 154409, 149399, 149082, 148569, 141942, 154062. Class-3.

Name Index of Applicants for Patents for the month of May, 1984 (Nos. 289|Cal|84 to 381|Cal|84, 130|Bom|84 to 159|Bom|84, 315|Mas|84 to 400|Mas|84 and 371|Del|84 to 450|Del|84).

#### Name & Appln. No.

A/S Niro Atomizer.—331|Mas|84.

Air Preheater Company Inc., The.—378|Cal|84.

Alain, G. C.—355|Mas|84.

All India Institute of Medical Science, Director, The.—417|Del|84.

Aluminium Pechiney.—291|Cal|84, 336|Cal|84 and 340|Cal|84.

American Cyanamid Company.—354|Cal|84.

Amin, R.—134|Bom|84 and 135|Bom|84.

Apeley Metals Limited.—381|Cal|84.

Asarco Incorporated.—413|Del|84.

Atochem.—341|Mas|84.

Ayyathurai, R.C.S.C.P.C.—321|Mas|84.

#### —B—

BL Technology Limited.—335|Mas|84.

Babu, V. V.—374|Mas|84.

Bajaj Auto Ltd.—139|Bom|84.

Balmer Lawrie & Co. Ltd.—313|Cal|84.

Bandfabrick Hevatex B.V.—372|Mas|84.

Banerjee, B. L.—360|Cal|84.

Bar & Stroud Limited 362|Mas|84.

Beaumont, J.-J. (Jean-J).—358|Cal|84.

Bendix Corp., The.—412|Del|84.

Bergwerksverband GmbH.—426|Del|84.

Bhagi, M.—143|Bom|84.

Bhagi, S. N.—143|Bom|84.

Borsig GmbH.—433|Del|84.

Bose, B. N.—301|Cal|84.

British Petroleum Company pl. c. The.—370|Mas|84 and 373|Mas|84.

Brush Switchgear Ltd.—425|Del|84.

Burns & McDonnell Engineering Company Inc.—410|Del|84.

#### —C—

CLE.—443|Del|84.

Ceat Tyres of India Limited.—342|Mas|84.

Cement Research Institute of India.—374|Del|84 and 395|Del|84.

Centennial Jewellers, Inc.—354|Mas|84.

Chakravorty, R.—368|Cal|84 and 369|Cal|84.

Chawla, S. K.—387|Del|84.

Chen Chi Electro Chemical Co. Ltd.—324|Cal|84.

Chief Controller Research & Development. The.—371|Del|84, 372|Del|84.

Choudhuri, S.—314|Cal|84.

Combustion Engineering, Inc.—333|Cal|84, 335|Cal|84 and 342|Cal|84.

*Name and Appln. No.*

Commander Appliances.—416|Del|84.  
 Compagnie Industrielle Des Telecommunications CIT-Alcatel.  
 —450|Del|84.  
 Conoco Inc.—394|Mas|84.  
 Contraves AG.—337|Mas|84 and 338|Mas|84.  
 Corning Glass Works.—350|Mas|84, 351|Mas|84 and 364|  
 Mas|84.  
 Council of Scientific and Industrial Research.—378|Del|84,  
 380|Del|84.  
 Creusot Loire.—399|Del|84.

## —D—

DLF Universal Ltd.—376|Del|84.  
 Das, P. S.—147|Bom|84.  
 das, P. S.—147|Bom|84.  
 Degussa Aktiengesellschaft.—338|Cal|84.  
 Demani, R. K.—303|Cal|84.  
 Dequekar, F. A. B.—374|Cal|84.  
 Deshpande, D. D. (Prof.) Director, IIT, Bombay.—157|Bom|  
 84, 158|Bom|84.  
 Dhonde, T. K.—132|Bom|84.  
 Diamond Shamrock Chemicals Company.—398|Mas|84.  
 Director, All India Institute of Medical Science, The.—417|  
 Del|84.  
 Dorr Oliver Incorporated.—377|Del|84.  
 Dow Chemical Company, The.—358|Mas|84, 393|Mas|84.  
 Dubank Electronics (Pty) Limited.—327|Mas|84.  
 Dyno Industrier A.S.—432|Del|84.

## —E—

E.I. Du Pont De Nemours and Company.—323|Cal|84.  
 Edwards, W.—299|Cal|84.  
 Energy Concepts Limited.—328|Mas|84.  
 Energy Conversion.—375|Cal|84.  
 Devices, Inc.—423|Del|84.  
 Esselte Pac Aktiebolag.—400|Del|84, 401|Del|84, 402|Del|84,  
 403|Del|84, 404|Del|84.  
 Ethicon, Inc.—365|Cal|84.

## —F—

Fabcon Incorporated.—446|Del|84.  
 Farmer, C. (Jr.).—442|Del|84.  
 Figueroa, A. A.—302|Cal|84.  
 Fiziko-Mekhanichesky Institut Imeni G. V. Karpenko Aka-  
 demii Nauk Krainskoi SSR.—306|Cal|84.  
 Freese, U. E.—318|Cal|84, 319|Cal|84.  
 Furma Manufacturing Co. Pty. Ltd.—366|Cal|84.

## —G—

GMT Novotny GmbH.—339|Cal|84.  
 Gea GmbH.—348|Cal|84.  
 Gea Luftkühlergesellschaft Happel GmbH & Co. KG.—325|  
 Cal|84, 327|Cal|84, 328|Cal|84, 329|Cal|84, 330|Cal|84,  
 370|Cal|84.  
 General Electric Company of India Limited, The.—312|Cal|  
 84.  
 George, M. P. (Dr.).—409|Del|84.  
 Geshuri Laboratories.—144|Bom|84.  
 Geshwind, D. M.—390|Del|84.  
 Ghosh, S. C.—315|Cal|84.

*Name and Appln. No.*

Gillette Company, The.—411|Del|84.  
 Girija, K.—374|Mas|84.  
 Gist-Brocades N. V.—391|Del|84.  
 Geopp, R. A.—318|Cal|84, 319|Cal|84.  
 Gupta, B. K.—397|Del|84, 408|Del|84.

## —H—

Haldor Topse A/S.—330|Mas|84, 331|Mas|84.  
 Haridas, V. V.—374|Mas|84.  
 Hariprasad, C.—320|Mas|84.  
 Harman, S. M.—391|Mas|84.  
 Hazra, S.—337|Cal|84.  
 Headrick, R. T.—332|Cal|84.  
 Heinz Kaiser Aktiengesellschaft.—389|Del|84.  
 Henkal Kommanditgesellschaft auf Aktien.—348|Mas|84.  
 Hindustan Antibiotics.—137|Bom|84.  
 Hindustan Ciba-Geigy Ltd.—136|Bom|84.  
 Hindustan Lever Ltd.—130|Bom|84.  
 Hindustan Organic Chemicals Limited.—145|Bom|84.  
 Hochstrasser, E.—381|Del|84.  
 Hochstrasser, J.—381|Del|84.  
 Hoechst Aktiengesellschaft.—305|Cal|84, 310|Cal|84, 311|Cal|  
 84, 349|Cal|84, 356|Mas|84.  
 Hoechst Pharmaceuticals Ltd.—155|Bom|84.  
 Hylsa.—345|Mas|84.

## —I—

I.C.A. S.p.A.—339|Mas|84.  
 Imperial Chemical Industries PLC.—383|Del|84, 385|Del|84.  
 Indian Explosives Limited.—292|Cal|84.  
 Indian Oil Corpn. Ltd.—140|Bom|84, 146|Bom|84.  
 Indian Yeast Company Limited, The.—343|Cal|84.  
 Institute PO Technicheska Kibernetika I Robotika.—382|Mas|  
 84.  
 Institut Francais Du Petrole.—326|Mas|84, 359|Mas|84.  
 Institut Metallurgii Imeni A.A. Baikora Akademii Nauk SSSR.  
 —306|Cal|84.  
 Instruments & Components.—375|Del|84.  
 Instytut Cieskiej Syntezy Organicznej Blachowula.—334|Cal|  
 84.  
 Ion Exchange (India) Limited.—138|Bom|84.

## —J—

Jayaram, V. V.—374|Mas|84.  
 Johnson & Johnson.—345|Cal|84.

## K

Kabushiki Kaisha Meidensha.—350|Cal|84.  
 Kalverkamp, K.—441|Del|84.  
 Kandasubbu, P.—379|Mas|84.  
 Kandaswamy, C. A.—318|Mas|84.  
 Kandaswamy, N. R. (Dr.).—157|Bom|84, and 158|Bom|84.  
 Kemp, W. E.—308|Cal|84.



<i>Name &amp; Appln. No.</i>
Kennich Petrochemicals Inc.—415 Del 84.
Keplan Aps.—371 Mas 84.
Kernira Oy.—332 Mas 84.
Khosla, R.—431 Del 84.
Khuller, I. S.—440 Del 84.
Kraftwerk Union Aktiengesellschaft.—289 Cal 84, 295 Cal 84, 296 Cal 84 and 322 Cal 84.
Kuberoppa.—340 Mas 84.
Kulkarni, P. K.—156 Bom 84.
Kulkarni, V. P.—156 Bom 84.
Kumar, A.—396 Del 84.
Kumari, K. P.—374 Mas 84.
Kuo, T-H (Tsung-Hsien)—343 Mas 84.
Kyorin Pharmaceutical Co. Ltd.—353 Mas 84.

## L

L'Air Liquide, Societe Anonyme Pour L'Etude Et L'Exploitation Des, Procèdes Georges Chaude.—386 Del 84.
Laboratoire Roger Bellon.—333 Mas 84, 334 Mas 84.
Lahir, U. J. (Mrs.)—142 Bom 84.
Latvīsky Gosudarstvenny Universitet Imeni Petra Stuchki.—428 Del 84.
Linde Aktiengesellschaft.—349 Mas 84.
Leeb, M. P.—318 Cal 84, 319 Cal 84.
Lehman, R.—298 Cal 84.
Lucas Industries Public Limited.—380 Mas 84.
Lyttag Limited.—325 Mas 84.

## M

M & T Chemicals Inc.—407 Del 84.
Maliakal, J. G.—409 Del 84.
Mallinokrodt, Inc.—378 Mas 84.
Manville Service Corporation.—290 Cal 84.
Maremont Corporation.—159 Bom 84.
Maruthia, C. M. A.—388 Del 84.
Mechanofabrik Rieter A.G.—366 Mas 84, 367 Mas 84, 368 Mas 84, 369 Mas 84, 384 Mas 84, 385 Mas 84, 386 Mas 84 and 387 Mas 84.
Mayall, P. L.—294 Cal 84.
McKeown, G.A.J.F.—384 Del 84.
McNeil-Alton, Inc.—379 Cal 84.
Merck Patent Gesellschaft mit beschränkter Haftung.—331 Cal 84.
Minnesota Mining and Manufacturing Company.—317 Mas 84.
Mistry, S. G.—152 Bom 84.
Mitsubishi Iukogyo Kabushiki Kaisha.—377 Cal 84.
Mitsubishi Mining & Cement Co. Ltd.—377 Cal 84.
Mobil Oil Corporation.—307 Cal 84.
Mott, J. C.—336 Mas 84.

## N

NEFF Gewindeempfindel GmbH.—353 Cal 84.
Nauchno-Issledovatel'sky Institut Khimikatov Dlya Polimer-nykh Materialov.—297 Cal 84.
Niky Tasha India Pvt. Ltd.—436 Del 84 and 437 Del 84.
Nippon Soda Company Limited.—344 Cal 84.
Nitto Boseki Co., Ltd.—397 Mas 84.
NOVO Industrie A/S.—324 Mas 84.

*Name & Appln. No.*

## O

OY Starplate Ltd.—326 Cal 84.
Oil and Natural Gas Commission.—418 Del 84, 419 Del 84, 420 Del 84, 421 Del 84, 422 Del 84.
Olbo Textilwerke GmbH.—361 Cal 84.
Oliver, J. A.—329 Mas 84.
Otsuka Chemical Co., Ltd.—357 Mas 84.
Otsuka Pharmaceutical Co., Ltd.—438 Del 84.

## P

P R B Nobel Explosifs.—398 Del 84.
PSC Freysinet Limited.—388 Mas 84.
Packam & Company.—148 Bom 84 and 149 Bom 84.
Panthaki, R. K.—151 Bom 84.
Paramount Glass Manufacturing Co., Ltd.—397 Mas 84.
Parker Pen Company, The.—405 Del 84.
Parthasarathy, M.—360 Mas 84, 361 Mas 84.
Pathak, S. N.—133 Bom 84.
Paul, S.—336 Mas 84.
Pavithran, V. V.—374 Mas 84.
Peck India.—444 Del 84 and 445 Del 84.
Pfizer Inc.—447 Del 84, 448 Del 84 and 449 Del 84.
Polska Akademia Nauk-Centrum Badan Molekularnych i Makromolekularnych.—293 Cal 84.
Pont-A-Mousson S. A.—381 Mas 84.
Preformed Line Products Company.—352 Mas 84.
Pychal, V. V.—374 Mas 84.

## R

Raju, R. D.—322 Mas 84.
Ravindraprasad, V.—374 Mas 84.
Reckitt & Colman Products Limited.—377 Mas 84.
Redland Technology Ltd.—435 Del 84.
Rhone-Poulenc Chimie De Base.—334 Mas 84.
Richter Gedeon Vegyeszeti Gyar Rt.—316 Cal 84 and 369 Mas 84.
Robert Bosch GmbH.—400 Mas 84.
Roy, N. C.—363 Cal 84 and 364 Cal 84.

## S

SCM Corporation.—321 Cal 84.
SKF Kugellager-fabriken GmbH.—304 Cal 84.
Sainsbury, G. M.—375 Mas 84.
Santosh Kumar, V. V.—374 Mas 84.
Schering Aktiengesellschaft.—427 Del 84.
Schroders, T.—359 Cal 84.
Sefaya, B. L.—394 Del 84.
Sen, S.—373 Del 84.
Siemens Aktiengesellschaft.—341 Cal 84.
Sinclair Research Limited.—389 Mas 84 and 390 Mas 84.
Singh, R. K.—347 Cal 84.
Straquadin.—406 Del 84.
Societe Anonyme D.J.A.—382 Del 84.
Societe des Produits Nestle S.A.—330 Cal 84.
Sonnaya, D. P.

*Name & Appln. No.*

Southern Boroax Limited, The.—319|Mas|84.  
 Spinair Corporation.—300|Cal|84.  
 Srivastava, S. C.—346|Cal|84.  
 Stauffer Chemical Company.—395|Mas|84.  
 Stopansko Obedinenie "QUARZ".—347|Mas|84.  
 Sumitomo Electric Industries, Ltd.—316|Mas|84 and 365|Mas|84.  
 Super Paris Private Ltd.—414|Del|84.  
 Surya Gears.—392|Mas|84.

**T**

Takeda Chemical Industries Ltd.—371|Cal|84.  
 Tamaskar, K. P. (Dr.).—141|Bom|84.  
 Telefunken Electronic GmbH.—355|Cal|84, 356|Cal|84.  
 Texas A & M University System, The.—376|Mas|84.  
 Texas Eastern, Engineering, Ltd.—439|Del|84.  
 Thaker, S. H.—150|Bom|84.  
 Tiwari, V. K. (Dr.).—157|Bom|84 and 158|Bom|84.

**U**

Union Carbide Corporation.—323|Mas|84, 351|Cal|84, 352|Cal|84, 363|Mas|84 and 424|Del|84.  
 Union Oil Company of California.—315|Mas|84.

*Name & Appln. No.***V**

Vereinigte Edelmetallwerke Aktiengesellschaft (VEW).—392|Del|84.  
 Vickers Australia Limited.—399|Mas|84.  
 Vikas Engineering Corporation.—130|Del|84.  
 Voest-Alpine Aktiengesellschaft.—372|Cal|84 and 380|Cal|84.  
 Vosper, G. W.—429|Del|84.

**W**

Warner-Lambert Company.—379|Del|84.  
 Westinghouse Electric Corporation.—309|Cal|84, 320|Cal|84 and 376|Cal|84.  
 Whitten, E. M.—294|Cal|84.  
 Wisdom, S. A.—393|Del|84.

**Y**

Yamato Iron Works Co., Ltd.—317|Cal|84.  
 Yellowstone Limited.—362|Cal|84 and 367|Cal|84.

**Z**

Zakłady Azotowe IM. J. Piłsudskiego.—357|Cal|84.  
 Zinser Textilmaschinen.—153|Bom|84, 154|Bom|84.

R. A. ACHARYA  
 Controller-General of Patents,  
 Designs and Trade Marks.